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ABSTRACT

Data obtained in 1956 on 629 households in 12 counties of the Arkansas Ozarks, matched and augmented by 1970 data on 313 households that covered half of the sample open-country segments used in the original study, form the basis of this study. Objectives of the study were to develop a statistical profile of the socioeconomic characteristics of the 1970 sample; to identify changes in the socioeconomic status of households since 1956; and to determine how those families remaining in the area have adjusted to changing economic opportunities in the community. Changes in socioeconomic characteristics of households and individuals are examined in the following areas: households and people in the open-country, occupational characteristics of the sample households, household and personal incomes, and Ozark farms and farming activities. The socioeconomic status of the households left behind is examined in terms of socioeconomic adjustment, employability attributes, and potential for progress. A list of 7 favorable aspects in economic readjustment is also presented. (PS)

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The Socioeconomic Adjustment of Rural Households in the Arkansas Ozarks

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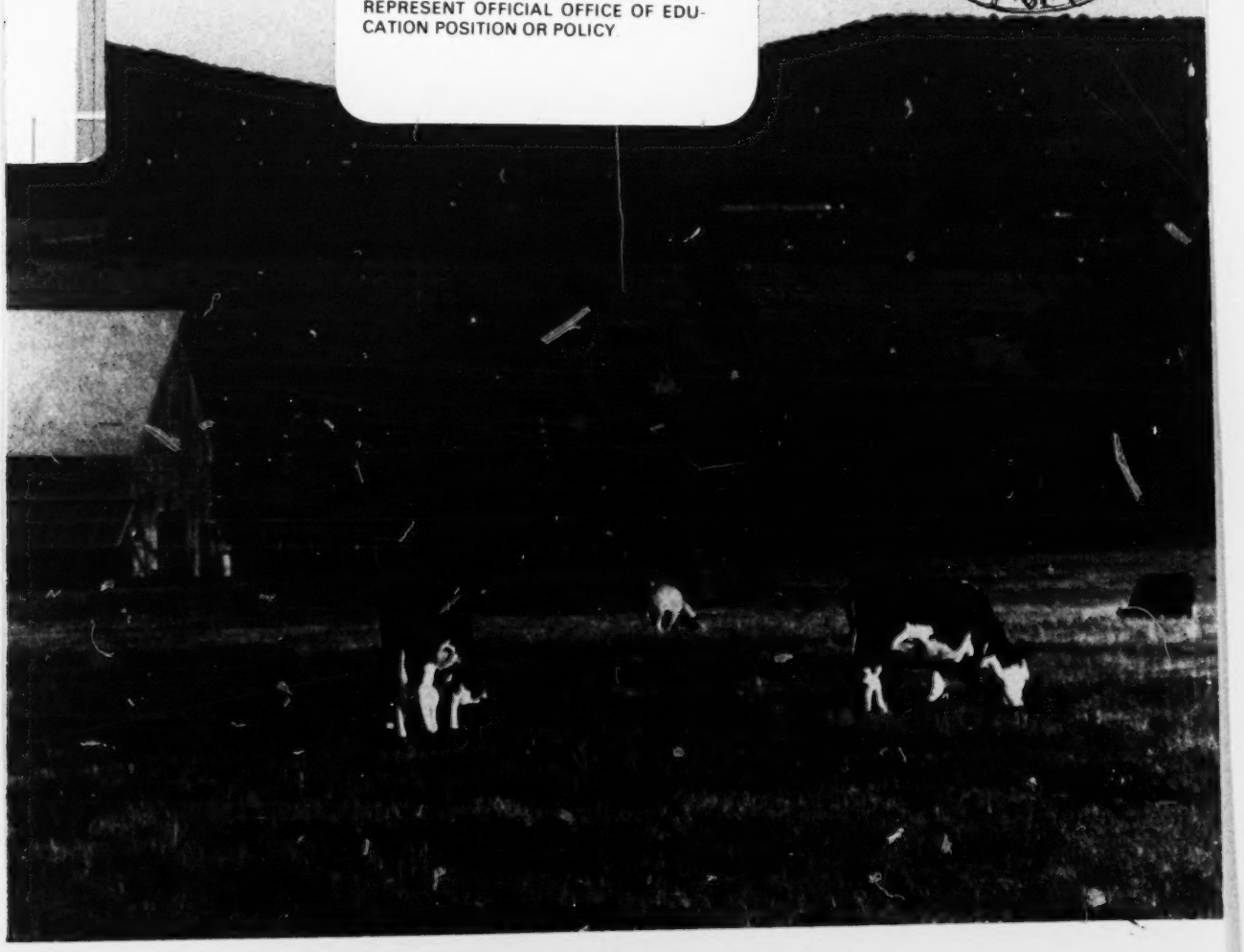

AGRICULTURAL EXPERIMENT STATION
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The Socioeconomic Adjustment of Rural Households in the Arkansas Ozarks

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By JOSEPH F. SINGER[1] and J. L. CHARLTON

Department of Agricultural Economics and Rural Sociology

The United States has experienced a long history of population redistribution. From early colonial times, through successive waves of westward expansion, to the recent rural-urban movement, Americans have been a mobile people. The migration from rural to urban areas has contributed enormously to industrial growth while drawing off surplus agricultural population. Yet, over the past 40 years, patterns of growth and levels of socioeconomic adjustment have varied considerably for different geographical areas of the nation.[2]

Accelerating mobility is a characteristic of modern society that reflects the dynamic and continuous nature of competition for advantage in a market-organized economy. Migration is considered an adjustment process that contributes to equalization of regional income levels, as well as relative growth achievement within a region. Yet rural poverty areas remain, characterized by high rates of out-migration and low incomes, while the cities begin to experience increasingly overcrowded conditions of poverty. The probable effects of the expected continuation of this historical pattern was the subject of a statement by Professor Dale Hathaway at the 1968 National Manpower Conference, in which he concluded: "Unless the cities and rural areas can find a policy under which they can all pull together, it seems likely to me that both may be pulled to pieces by social forces which neither can control alone."[3]

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[1] Formerly instructor, University of Arkansas; now assistant dean and asst. professor of administration, School of Administration, Univ. of Missouri-Kansas City.

[2] H. S. Perloff and others, Regions, Resources, and Economic Growth, Johns Hopkins Press, Baltimore, 1960.

[3] U. S. Congress, Senate Committee on Government Operations, Subcommittee on Government Research, "The Rural to Urban Population Shift, A National Problem," Conf., 90th Cong., 2nd Sess., U. S. Govt. Printing Office, p. 11, 1968.

Historically, the first settlers of the Ozarks were farmers, who, over time, suffered from the "poor fertility of the land, relative isolation, soil erosion, and high birth rates."[4] Their intensive farming soon gave way to timber and mineral exploitation and on through successive stages to the present retirement-recreational intensive and agricultural extensive state.[5]

The Ozark area was characterized recently by Calvin Beale as an area of low fertility and low natural increase (births over deaths) due to a large in-migration of older people into retirement areas and out-migration that reduced the number at the age of reproduction.[6] Over most of the 14 years covered by this study, there was a general level of heavy out-migration "selective of the young adult ages and less of the middle-age people, so that the average age has advanced up to 35 years and above with severe undercutting of the numbers of children."[7] Farms have been combined into larger and seemingly more economical units. Retirement-aged people with greater capital wealth and retirement incomes well above area family averages have been attracted to the lake districts within the area. Another group of newcomers has taken part in resort and recreational development, capitalizing on the tourist trade and other forms of commercial growth. A third group of new residents includes the "gentleman farmers," produced by new agricultural capital and new ideas. For the most part, these people represent retirement or near-retirement individuals and families escaping the rapid pace of urban life with its overcrowded conditions.

The cross sectional studies of the past—with their emphasis on the variables of age, education, and income—do not reveal meaningful changes in the socioeconomic status of families, nor labor-force and social adjustments in the residual communities. As out-migration continues from the open-country rural areas of Arkansas, some individuals and families may experience a rise in socioeconomic status, while others regress. Analysis of the various components of change requires studying comparable populations over a period of time. Although aggregate analysis of changes in total population tells if growth or decline has occurred, these studies do not provide information on the "how" and "why" of adjustments.

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[4] Carl C. Taylor, Helen W. Wheeler, and E. L. Kirkpatrick, "Disadvantaged Classes in American Agriculture," FSA Social Project Report, U. S. Dept. of Agr. Project No. VIII, U. S. Govt. Printing Office, p. 65, 1938.

[5] Lloyd D. Bender and Bernal L. Green, "Adaptive Change by the Ozarks Economy," Dept. of Agr. Econ. and Rural Sociol., Mimeographed, p. 2, 1969.

[6] Calvin L. Beale, "Natural Decrease of Population: The Current and Prospective Status of an Emergent American Phenomenon," Demography, Vol. 6, No. 2, pp. 91-94, 1969.

[7] U. S. Congress, Senate, op. cit., p. 15 (statement of Calvin L. Beale, May 17, 1968).

The 1970 Study

The data for this study were drawn from a 12-county area of the Arkansas Ozarks. This area was designated by census officials on the basis of what was defined as a "distinctive economy" in terms of similar social and economic characteristics (agricultural, climatic, physiographic, and cultural) throughout the area.[8] This northcentral Arkansas area includes Baxter, Boone, Carroll, Cleburne, Fulton, Izard, Madison, Marion, Newton, Searcy, Stone, and Van Buren counties (Figure 1). The similarity of these counties in several indicators of socioeconomic status and comparisons with the state's averages may be noted in Table 1.

In view of the "historical" approach of this study to the nature of socioeconomic adjustments in low-income areas, the

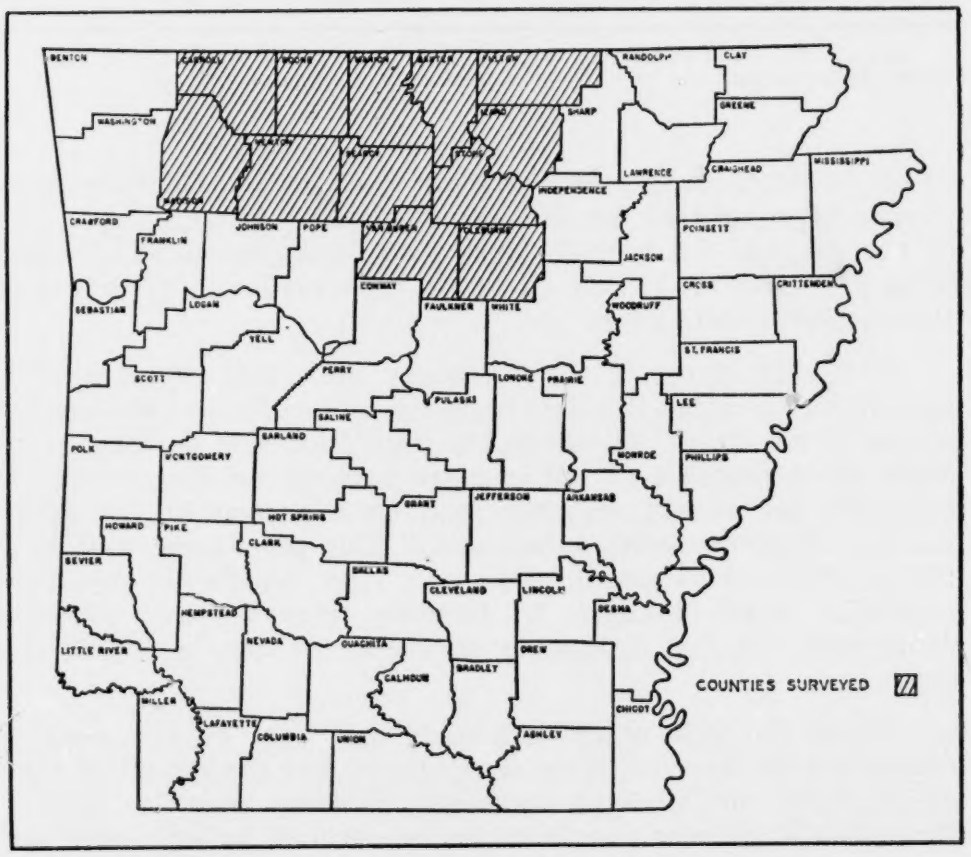

Figure 1. The 12-county area in northcentral Arkansas.

[8] Donald J. Bogue, State Economic Areas, U. S. Bureau of the Census, U. S. Govt. Printing Office, p. 4, 1951.

Table 1. Age, Education, and Income of Residents in the 12-County Arkansas Ozark Area, 1960

County	Median age	Population 65 years old and over	Median school years completed	Families: Incomes less than $3,000	Families: Median income
	Years	*Percent*	*Number*	*Percent*	*Dollars*
Baxter	39.8	17.2	8.9	53.2	2,800
Boone	35.2	14.3	9.0	52.9	2,837
Carroll	38.9	16.8	8.8	59.1	2,555
Cleburne	34.2	12.8	8.5	64.3	2,137
Fulton	36.7	15.6	8.5	70.2	1,886
Izard	36.8	14.8	8.5	66.1	2,099
Madison	34.8	14.8	8.3	68.8	1,928
Marion	38.8	15.0	8.8	68.5	2,260
Newton	38.5	14.8	8.3	76.7	1,666
Searcy	33.5	13.3	8.3	69.8	2,066
Stone	31.3	12.2	8.3	78.8	1,740
Van Buren	37.0	15.5	8.5	68.6	1,968
12-county area	35.5	14.8	8.5	66.4	2,162
State	29.0	10.9	8.9	47.7	3,184

Source: Census of Population, 1960, Characteristics of the Population of Arkansas, United States Department of Commerce, Bureau of the Census, Vol. II.

structural methods of a 1956 study by Metzler and Charlton[9] were closely approximated for data comparability. Although only half of the original households were examined, research schedules were developed to match all of the information available from this earlier investigation.

The 1956 study of the 12-county area was sampled on a geographic or area-sampling basis. In view of the open-country nature of the study, the statistical population was defined to exclude all settlements of 100 or more persons and the number of segments per county was allocated on the basis of the actual number of open-country inhabitants.[10] This procedure resulted in the selection of 68 sample segments, from which 313 interview schedules were obtained. In addition, records were obtained concerning the last occupants of vacant houses in the sample segments.

While the 1956 study provided basic data on the working population of the area, their occupations, and the extent of their employment or underemployment, finding specific avenues through which these people might be reached by economic programs remains a problem of determining "why" and "how" they

[9] William H. Metzler and J. L. Charlton, "Employment and Underemployment of Rural People in the Ozark Area," Ark. Agr. Expt. Sta. Bul. 604, 1958.

[10] Ibid., p. 8.

have adjusted to economic progress and out-migration. Only when this is determined can programs be better designed to assist these people toward a more complete utilization of their resources and the resources of the area.

Area Characteristics

The 12-county area as a whole is characterized by decreasing population. Between 1940 and 1970 only two counties, Baxter and Boone, gained in population; this reflects the growth of two urban places—Mountain Home and Harrison. As for the more rural counties of Izard, Newton, Searcy, and Van Buren, a heavy loss of population is indicated (Table 2).

Table 2. Population Change in the 12-County Arkansas Ozark Area, 1940 to 1970[1]

County	Total population				Change 1940 to 1970	
	1970	1960	1950	1940	Absolute	Percent
Baxter	15,319	9,943	11,683	10,281	+ 5,038	+49.0
Boone	19,073	16,116	16,260	15,860	+ 3,213	+20.3
Carroll	12,301	11,284	13,244	14,737	— 2,436	—16.5
Cleburne	10,349	9,059	11,487	13,134	— 2,785	—21.2
Fulton	7,699	6,657	9,187	10,253	— 2,554	—24.9
Izard	7,381	6,766	9,953	12,834	— 5,453	—42.5
Madison	9,453	9,068	11,734	14,531	— 5,078	—34.9
Marion	7,000	6,041	8,609	9,464	— 2,464	—26.0
Newton	5,844	5,963	8,685	10,881	— 5,037	—46.3
Searcy	7,731	3,124	10,424	11,942	— 4,211	—35.3
Stone	6,838	6,294	7,662	8,603	— 1,765	—20.5
Van Buren	8,275	7,228	9,687	12,518	— 4,243	—33.9
Area	117,263	102,543	128,615	145,038	—27,775	—19.2
State	1,923,295	1,786,272	1,909,511	1,948,387	—26,092	— 1.3

[1] Source: U. S. Census of Population, Arkansas, Number of Inhabitants (decennial reports), U. S. Department of Commerce, Bureau of the Census.

Despite a decline in total population of approximately one-fifth from 1940 to 1970, it is evident that the economic position of the Ozark people improved (Table 3). During the period from 1954 to 1964, retail sales nearly doubled. This represents a per capita change from $494 in 1954 to $1,098 in 1964. The growing importance of manufacturing in the area from 1954 to 1964 is demonstrated by the 89 percent increase in employees, while "value added" increased almost four times.

The number of farms decreased by 25 percent, while the size of individual farms increased by nearly one-fifth. This reflects a continuing shift from the small subsistence farm of years past toward larger units on which machine power comes into use. In the process much land shifts from agriculture to other uses.

Table 3. Economic Changes in the 12-County Arkansas Ozark Area, 1954 to 1964

Item	Unit	1964	1959	1954
Farms	No.	12,264	13,017	16,456
Average size	Acre	195	190	166
Value land and buildings per farm	Dol.	15,463	8,397	5,788
Value dairy products sold	Dol.	6,568,527[1]	5,907,272	4,624,606
Value cattle sold	Dol.	9,964,365	4,946,297	6,149,606
Chickens sold	No.	33,486,563	22,360,337	8,955,867
Land in crops (harvested)	%	6.9	8.2	9.0
Land in corn	Acre	17,513	43,131	50,196
Land in cotton	Acre	2,729	4,261	11,318
Manufacturing establishments	No.	183	180	179
Manufacturing employees	No.	4,109	2,483	2,175
Value added by manufacture	Dol.	19,288,000[2]	5,706,000	5,188,000
Retail sales	Dol.	90,316,000[3]	65,652,000	51,144,000
Farm operators reporting 100 days or more off-farm work	%	39.5	37.0	33.2

[1] Index of farm prices, 1957-59 base; 1954:101, 1959:99, 1964:98.

[2] Index of manufactured goods, 1957-59 base; 1954:92, 1959:102, 1964:104.

[3] Index of rural living costs, 1957-59 base; 1954:95, 1959:102, 1964:107.

Source: Agricultural data from U. S. Census of Agriculture, 1954, 1959, and 1964; manufacturing data from U. S. Census of Manufacturers, 1954, 1959, and 1964; retail sales data from U. S. Department of Commerce, "Retail Sales," 1954, 1959, and 1964; index data from Council of Economic Advisors, "Economic Indicators," 1964.

A significant element of agricultural change has been the greater emphasis on livestock production. While cropland harvested decreased by approximately one-fifth, both livestock and dairy production increased. The importance of broiler production in the Ozark area is indicated by the growing number of chickens sold.

The per capita income for the 12-county area was estimated as $566 in 1954 and $1,668 in 1968. The corresponding figures for the state are $991 and $2,322.[11] This means that gain was more rapid in the area than in the state, and that the area's per capita income moved from 57 percent of the state average in 1954 to 72 percent in 1968. The median family income by U. S. Census report of 1960 was $2,162, well below the $3,000 desirable standard set by the Council of Economic Advisors. This strongly suggests the importance of research programs in regard to the area, the people, and the economy they have developed. Such research must begin with some understanding of the nature and direction of social mobility in response to the migration patterns found in the Arkansas Ozarks area.

[11] Per capita income estimated by the Bureau of Business and Economic Research, University of Arkansas College of Business Administration.

Basic Concepts

In this study several basic social scientific concepts form the frame of reference in which the dynamic process of social change in rural areas is analyzed.

Socioeconomic Status

Although "socioeconomic status" is often used in social science literature, the term is difficult to define. Its complex nature has evolved from Max Weber's early distinction among class, status, and political strata.[12] Weber emphasized that men are differentiated by both economic and social forms of participation.

In the first volume of the "Yankee City Series," W. Lloyd Warner and Paul S. Lunt discussed various functional aspects of stratification, pointing out that social participation and associations directly influence the stratum in which individuals are acceped, while a family's possessions and characteristics indirectly affect its prestige.[13]

Prominent in today's sociological literature, however, is the structural theory of social stratification. This theory supports the proposition that occupational structure is the critical link between the economy and the family through which the hierarchies of social prestige and economic classes are rooted.[14]

The theoretical orientation of this study employs a three-dimensional approach to the definition of socioeconomic status. From the functional point of view, family material possessions, including housing conditions, make up one component in the analysis, while social participation and associations account for the second. Adopting the structuralist point of view, the authors analyzed occupation and occupational mobility over time as the third connecting element in illuminating the socioeconomic progress of those left behind in the low-income rural areas.

Adjustment

The concept of "adjustment," as operationally defined by John Mangalam, refers to a dynamic state of equilibrium within a

[12] Max Weber, Essays in Sociology, Oxford University Press, New York, pp. 180 to 195, 1946.

[13] W. Lloyd Warner and Paul S. Lunt, The Social Life of a Modern Community, Yale University Press, N.Y., pp. 81 to 126, 1941.

[14] Talcott Parsons and Neil J. Smelsen, Economy and Society, Free Press, Glencoe, pp. 51 to 55, 70 to 72, 1956.

given interactional system.[15] Accordingly, the act of adjustment involves a process of change in which individuals and families make use of available means to meet problems of external and internal change, perform their major roles, satisfy their needs or wants, and achieve their life goals.[16] For measurement purposes, it is suggested that certain functional criteria, taken in combination, are valid tests of the nature and level of adjustment of rural families.

In a sense, the process of social adjustment is a particular aspect of social mobility through which individuals and families change their state of being. The adjustment process is both the result of effort on the part of the individual to meet social change and a result of some goal-directed or value-realizing activity and opportunity in the system.

For the purposes of this study, the process of adjustment is the particular sequence of purposeful activity on the part of individuals and families to meet and deal with new cultural demands of the interactional system. Therefore, it is necessary to determine the extent to which families have achieved their goals relative to the expectations and norms of the social system to which they belong.

Net Migration

The geographic movement of population from one area to another over a given period of time is termed migration. Net migration represents the difference between the flow of population into an area (in-migration) and the flow of population out of the area (out-migration). Net migration is reported as a positive or negative residual computed from population change and the difference between births and deaths over a period of time.

Total change in population (as presented in Table 2) does not distinguish between changes due to births or deaths and due to population movement. Net migration, however, provides an estimate of the difference between outward and inward movement for an area (Table 4) and, since age selectivity is involved in migration, it is more predictive of change in the labor supply than is total population change per se.

Table 4 demonstrates that while the population change for the 12-county area appears to be approximately 11,300 people,

[15] John J. Mangalam, "A Reconsideration of the Notion of Adjustment: An Exploration," Ken. Agr. Expt. Sta., pp. 14 and 15, 1962.

[16] Seung Gyu Moon and Glenn C. McCann, "Subregional Variability of Adjustment Factors," No. Car. State University Press, Raleigh, pp. 6 and 7, 1966.

Table 4. Net Migration of the Population in the 12-County Arkansas Ozark Area, 1950 to 1970

County	Absolute population change[1]	Natural increase (births minus deaths)[2]	Total net migration	Net migration rate
Baxter	+ 3,636	1,317	+ 2,319	+19.8
Boone	+ 2,813	2,985	— 172	— 1.1
Carroll	— 943	1,110	— 2,053	—15.5
Cleburne	— 1,138	1,273	— 2,411	—21.0
Fulton	— 1,488	816	— 2,304	—25.1
Izard	— 2,572	803	— 3,375	—33.9
Madison	— 2,281	1,601	— 3,882	—33.1
Marion	— 1,609	736	— 2,345	—27.2
Newton	— 2,841	1,541	— 4,382	—50.5
Searcy	— 2,693	2,674	— 5,367	—51.5
Stone	— 824	1,230	— 2,054	—26.8
Van Buren	— 1,412	1,070	— 2,482	—25.6
Area	—11,352	17,156	—28,508	—22.2

[1] Derived from U. S. Census of Population, 1950 and 1970, Arkansas, Number of Inhabitants. U. S. Department of Commerce, Bureau of the Census.

[2] The Vital Statistics of the United States, Vol. I Natality and Vol. II Mortality (annual reports), U. S. Department of Health, Education, and Welfare, National Center for Health Statistics.

about 28,500 or 22.2 percent more of the population moved away from than into the counties between 1950 and 1970.

Anomia

Low-income rural areas of the South have numbers of individuals with a psychological state of mind characterized by strong personal anxiety, hopelessness, uncertainty, and despair.[17] According to Harold Hodges, this "blend of insecurity, powerlessness, and pessimism comes close to defining what a number of analysts take to be anomia."[18]

In this study, anomia represents a correlate in the analysis of potential for socioeconomic adjustment on the part of individual family heads and will be measured by the Strole Scale.[19]

Underemployment

It has long been recognized by students of labor economics that measures of unemployment do not adequately indicate the real nature of labor resource utilization. This is especially true

[17] Charles L. Cleland, "Regional Project Organization and Data Comparability," Rural Sociology, Vol. 29, pp. 194 to 199, 1964.

[18] Harold M. Hodges, Social Stratification; Class in America, Sckenkman Publishing Co., Cambridge, p. 199, 1964.

[19] Leo Strole, "Social Integration and Certain Corollaries: An Exploratory Study," Amer. Sociol. Review, Vol. 21, No. 6, 1956.

in the South, where low income levels have not been associated with high unemployment. As early as 1936, Joan Robinson coined the term "disguised unemployment" to refer to situations in which workers accepted less productive occupations at the time of a decline in effective demand.[20] More recently, Ethel B. Jones defines underemployed to include three aspects: (1) employed at a job below your skill level or highest attained level, (2) employed at low rates of pay, and (3) employed but involuntarily working short work periods.[21] In this sense, underemployment refers to how effectively an individual's employment utilizes those characteristics for work that he brings to the job. In the present investigation the number of working days lost during a year represents a clearly measurable aspect of the problem in rural areas.

CHANGES IN SOCIOECONOMIC CHARACTERISTICS OF HOUSEHOLDS AND INDIVIDUALS IN THE ARKANSAS OZARKS, 1956 TO 1970

To provide the necessary research data on which to base evaluation of the effects of out-migration from depressed rural areas, the first and second objectives of this study were to develop a complete statistical profile of the socioeconomic characteristics of the 1970 area sample population and to identify important changes since 1956 in the socioeconomic status of households and individuals. The research findings of the current study will be presented first and then the various socioeconomic characteristics of the 1970 sample will be compared with those of the 1956 sample.

Households and People in the Open-Country

The present population of the Ozark region has evolved from its maximum in about 1910, when logging and lumbering were its primary industry, to a population in which children and young

[20] Joan Robinson, Essays in the Theory of Employment, 1st ed., Basil Blackwell, Oxford, 1937.

[21] Ethel B. Jones, "A Feasibility Study to Identify the Underemployed and to Examine the Labor Market Attachment of Labor Force Nonparticipants in a Low-Income Area," Bur. of Bus. and Econ. Research, University of Georgia, pp. 18 to 22, 1969.

Table 5. Household Size and Sex of Head, Arkansas Ozark Area, 1970 and 1956[1]

Number in households	All households		Household head			
			Male		Female	
	No.	*%*	*No.*	*%*	*No.*	*%*
1970 study						
All households	313	100	289	100	24	100
1 person	31	10	17	6	14	59
2	130	41	123	43	7	29
3	56	18	54	19	2	8
4	34	11	33	11	1	4
5	31	10	31	11	0	0
6	18	6	18	6	0	0
7	4	1	4	1	0	0
8	4	1	4	1	0	0
9 or more	5	2	5	2	0	0
Median size	2.5		2.6		1.4	
1956 study						
All households	629	100	590	100	39	100
1 person	45	7	26	4	19	49
2	218	35	209	35	9	23
3	111	18	106	18	5	13
4	101	16	98	17	3	7
5	75	12	74	13	1	3
6	33	5	31	5	2	5
7	20	3	20	3	0	0
8	15	2	15	2	0	0
9 or more	11	2	11	2	0	0
Median size	3.0		3.1		1.6	

[1] Unless otherwise stated, this and the following tables are based on data obtained in samples of 629 households in 1956 and 313 households in 1970 residing in the open country of the 12-county area.

adults no longer form a major element.[22] Before 1950, the out-migration of individuals from large farm families provided the main movement. During the 1950's, family migration from the region became more pronounced. Also, a counter movement into the area of persons of retirement or near-retirement age greatly increased the proportion of older people in the present population.

Household Size and Composition

One fact portrayed in Table 5 is the proportion of households with one or two members. During the 14 years from 1956 to 1970, the proportion of these families increased from 42 to 51 percent reflecting both the continued out-migration of young people and families, and the increase of small families in the later years of the life cycle. Only 20 percent of the households had five or more members, as compared with 24 percent in 1956.

While in 1956, 49 percent of households headed by a female had one member, today this has risen to 59 percent. Households

[22] J. L. Charlton, "Farm People on the Move," Arkansas Agricultural Economist (Fayetteville: Univ. Ark. Div. Agr., 1961), Vol. 3, No. 2, p. 2.

with a male head as a single member increased from 4 to 6 percent of male-headed households. In both cases, these represent a high proportion of widowed and old people as opposed to young adults out on their own.

Dependency

Social scientists have employed ratios of dependency to illustrate the nature and changing responsibility of the working-age population for the care of children and persons 65 and older. In a statistical sense, an inverse relation exists between dependency and economy capability to meet household responsibilities.

The ratios in Table 6 are based on the number of persons either ages 14 years and under or 65 and older, per 100 persons aged 20 years through 49. Persons 65 and older are considered to be of retirement age and children under 15 are considered too young to work effectively.

The sample data result in a high dependency ratio of 128, compared with 103 for the United States and 119 for Arkansas. The dependency ratio is even higher (136) in the total population of the 12-county area than in the sample population. Villages and urban places not included in the sample population are indicated

Table 6. Age Distribution of the Population and Dependency Ratios, United States and Arkansas, 1970, and the Ozark Area, 1970 and 1956

Age (years)	Population		Population 12-county Ozark area		
	United States[1]	Arkansas[2]	All[2]	In rural sample households	Rural 1956[3]
			Percent		
All persons	100.0	100.0	100.0	100.0	100.0
Under 15	29.2	28.2	23.9	24.3	29.6
15 to 19	9.1	9.5	8.0	9.5	8.4
20 to 49	37.7	34.1	30.6	30.6	34.0
50 to 64	14.4	15.9	19.9	20.6	16.0
65 and over	9.6	12.3	17.6	15.0	12.0
			Number per 100 individuals 20 to 49 years old		
Dependency ratios					
Youth (under 15)	77.3	82.6	78.2	79.3	87.1
Aged (65 and over)	25.4	36.1	57.6	49.2	35.2
Youth-aged	102.7	118.7	135.8	128.5	122.3

[1] Based on estimates by the U. S. Bureau of the Census for July 1, 1969.

[2] Derived from 1970 Census for Arkansas, advanced report, General Population Characteristics. In order to obtain 49- and 50-year separation for above classes the number 45 to 49 years and 50 to 54 years were estimates from the 45 to 54 age class by lineal extrapolation.

[3] Estimated from 1950 and 1960 population censuses by lineal extrapolation.

as attracting more elderly persons than the open country of the sample.

The higher than normal "dependency" is primarily due to the disproportionate representation of the aged in the area. Persons less than 15 years old are somewhat underrepresented. This is more evident when the child-age group is expressed as a percent of the total population rather than related to persons 20 to 49 years, an age class most affected by out-migration. The decline in the 20- to 49-year component is due to somewhat below average fertility and to the higher rate of migration of families with young children than of others farther advanced in the family life cycle. The fertility ratio (the number of persons under 5 per 1,000 women 20 to 44 years) was 504 in 1970, compared to the state figure of 550 and the national figure of 540. The selectivity in out-migration of young families is implied in the data but it was not directly measured.

The relatively large and increasing size of the aged component (Table 7) is due to the in-migration of older people and the aging of the area's residual population. The aged nonmigrants spent their youthful years in the Ozarks when the population was relatively stable. A result of the age-heavy nature of population composition is most strikingly revealed in the rate of natural increase. The birth rate for the 12-county area for the period 1960 through 1969 (number of births per 1,000 of the 10 mid-year populations) is 15.0 and the death rate 10.3, or a natural increase of 4.7. The comparative rates for the state are 20.3 for births, 9.3 for deaths, and 11.0 for natural increase.

Expressed obversely, increasing "dependency" means that the labor force decreases in proportion to the total population, and the proportion outside the more employable ages increases. However, persons outside the employable ages are consumers and

Table 7. Age Dependency Ratios in the 12-County Arkansas Ozark Area and State, 1940 to 1970[1]

Item	1970	1960	1950	1940
Arkansas	36.1	31.4	19.9	13.2
12-county area	57.6	46.3	24.0	16.5
Rural	49.2[2]	46.4	24.1	16.6
Nonfarm	56.0	54.2	27.3	17.4
Farm	41.5	33.6	22.4	16.4

[1] The ratio is the number of people age 65 years old and over per 100 persons 20 to 49 years old.

[2] Ratios derived from census data except rural nonfarm and farm for 1970 which are based on sample data of the study.

Table 8. Length of Residence of Households, by Tenure Class, 1970 and 1956

Tenure class	All households	Years on present place				Median years
		0 to 4	5 to 9	10 to 14	15 or more	
	Number	*Percent*				*Number*
1970 study						
All	313	23	22	14	41	11.8
Farm						
Owner	141[1]	13	13	18	56	15.0
Renter	2	50	50	0	0	4.0
Nonfarm						
Owner	136	22	30	13	35	8.6
Renter	32	66	25	3	6	3.0
1956 study						
All	611	27	20	19	34	10.8
Farm						
Owner	304	15	20	22	43	13.4
Renter	38	53	16	10	21	3.8
Nonfarm						
Owner	208	29	21	19	31	10.0
Renter	61	69	10	8	13	2.9

[1] Two cases not reported for tenure status.

their increase in numbers and demand for goods and services is undoubtedly a factor in the increase in employment of the labor force in the Ozark area (see p. 33).

Length of Residence

Although the Ozark population is beginning to show signs of stability, a very substantial percentage (1 in 5) of the present population in the sampled households have been at their present location less than five years (Table 8). At the other extreme 2 in 5 reported 15 or more years of residence on their present places.

Length of residence continues to be greater for farm than nonfarm housholds. Farm owners reporting 15 years or more in residence have increased from 43 to 56 percent, while farm renters have significantly reduced their length of residence; the economic implications of this are discussed later. For farm owners, the median years in their current residence has increased from 13 to 15 years. Nonfarm families reduced their median residence from 10 to 8 years, despite the fact that many nonfarm residents in the area leave and return each year. This group includes construction workers who travel to large midwestern cities during the summer and fall and migrant workers who go off seasonally to pick fruit or to work timber, and then return to their permanent homes in the area.

The changing mobility of rural open-country people is dem-

onstrated by information regarding the last occupants of vacant houses in the sampled segments. Only 45 percent of the houses had been vacated in the three years preceding the 1970 survey compared with 66 percent at the time of the 1956 survey (Table 9). A significant fact regarding these families is the number of

Table 9. Data on the Last Occupants of Vacant Houses, 1970 and 1956

Item	1970		1956	
	No.	*Pct.*	*No.*	*Pct.*
Total families	100	100	216	100
When family left				
Less than 6 months prior to study date	14	14	54	25
6 to 12 months before	12	12	43	20
2 and 3 years before	19	19	46	21
4 to 6 years before	15	15	45	21
7 or more years before	23	23	20	9
Unknown	17	17	8	4
Where they went				
Arkansas	53	53	90	42
Adjacent states	12	12	47	22
Far West states	6	6	44	20
Lake states	3	3	22	10
Other states	1	1	2	1
Unknown	25	25	11	5
Persons in the family				
1	13	13	14	6
2	24	24	44	21
3	14	14	34	16
4	11	11	42	20
5	8	8	31	14
6 and over	7	7	26	12
Unknown	23	23	25	11
What the head does now				
Farming	13	13	24	11
Farm wage work	4	4	28	13
Nonfarm work	30	30	106	49
Retired, disabled, etc.	15	15	26	12
Unknown	38	38	32	15
What the head did before leaving				
Farmed only	23	23	63	29
Nonfarm only	15	15	21	10
Farm and nonfarm	20	20	38	18
Farm wage work	0	0	9	4
Did not farm (physically able)	8	8	45	21
Did not farm (retired or disabled)	12	12	17	8
Unknown	22	22	23	10
Age of the head				
Under 35 years	12	12	33	15
35 to 44 years	6	6	53	25
45 to 54 years	18	18	48	22
55 to 64 years	16	16	22	10
65 and over	22	22	30	14
Unknown	26	26	30	14
Place now being farmed				
Yes	41	41	56	26
No	46	46	134	62
Unknown	13	13	26	12
Acres in the place				
Under 40 acres	17	17	17	8
40 to 79 acres	9	9	38	18
80 to 159 acres	23	23	33	15
160 to 240 acres	4	4	17	8
240 and over	7	7	14	6
Unknown	40	40	97	45

households with heads 55 years and older at the time of their leaving the area; 38 percent compared with 24 percent earlier.

The pattern of movement from the area appears to have lost some of its predictability. Metzler and Charlton reported out-of-state movement to Lake States and Far West States in continuation of a pattern established by migrants during the thirties and forties.[23] This had declined by 1970. Instead, 53 percent of the previous occupants were reported as still in the state, as opposed to only 42 percent in 1956. This may indicate increasing employment opportunity within Arkansas.

Family Economic Type

The movement of farmers from the area reveals noteworthy facts about comparative land-use adjustments. While approximately 50 percent of previous occupants in 1956 were engaged in farming activities, only half of their farm land continued in agricultural use after their departure. In 1970, 43 percent leaving were farm occupants, and nearly all of their land appears to have passed into agricultural use. Also, the movement of these households was not predominantly out of agriculture, as was the case in 1956. While the previous occupants in the 1970 study may not have had the skill or education to undertake permanent nonfarm employment, they still were capable of reestablishing themselves in agriculture, with its large asset requirements; this implies an improved real wealth situation compared with the 1956 migrants.

In this study, classification of households by family economic type[24] places emphasis on occupational structure. From an analytical point of view, such a classification allows concise estimates of aggregate socioeconomic adjustment by rural open-country households in making use of available means to meet the problems of internal and external change. Each of the five major groups is associated with differing institutions and spheres of social participation, or combinations of these. Their changing numbers indicate a process of social mobility, requiring adjustments within the interactional system to which these individuals and households belong.

Aggregate adjustments in the economic base of the Ozark area are portrayed by Table 10. Changes in family economic type at first reveal a continuation of the gradual shift out of agricul-

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[23] Metzler and Charlton, op. cit., p. 44.

[24] J. E. Wills and Harold L. Koeller, "Employment and Income of Rural Families in Southern Illinois," Ill. Agr. Expt. Sta. Bul. 580, 1955.

Table 10. Households and Persons 14 Years Old and Over, by Residence, Principal Income Source, and Family Economic Type, 1970 and 1956

Residence and economic types	All households		Persons 14 years old and over	
	Number	*Percent*	*Number*	*Percent*
1970 study				
All	313	100	750	100
Residence and farm type				
Farm	146	47	371	49
Commercial	69	47	166	45
Part-time	70	48	188	51
Residential	5	3	13	3
Unclassified	2	2	4	1
Nonfarm	167	53	379	51
Family income type				
Agriculture only	16	5	36	5
Nonfarm work only	47	15	123	16
Nonwork only	77	25	151	20
Agriculture plus nonfarm				
Mainly agriculture	10	3	23	3
Mainly nonfarm	37	12	98	13
Nonfarm plus nonwork				
Mainly nonfarm	28	9	75	10
Mainly nonwork	12	4	26	4
Agriculture plus nonwork				
Mainly agriculture	24	8	56	8
Mainly nonwork	23	7	60	8
Agriculture plus nonfarm and nonwork				
Mainly agriculture	3	1	7	1
Mainly nonfarm	31	10	83	11
Mainly nonwork	4	1	10	1
No income or not reported	1	0	2	0
Family economic type				
Farm	60	19	144	19
Nonfarm	72	23	191	25
Farm-nonfarm	92	30	237	32
Semi-employment	0	0	0	0
Nonwork	89	28	178	24
1956 study				
All	629	100	1,575	100
Residence and farm type				
Farm	350	56	918	58
Commercial	211	60	538	58
Part-time	48	14	134	15
Residential	58	17	155	17
Unclassified	33	9	91	10
Nonfarm	279	44	657	42
Family income type				
Agriculture only	112	18	282	18
Nonfarm work only	83	13	217	14
Nonwork only	123	20	234	15
Agriculture plus nonfarm				
Mainly agriculture	34	5	93	6
Mainly nonfarm	73	12	220	14
Nonfarm plus nonwork				
Mainly nonfarm	45	7	127	8
Mainly nonwork	14	2	34	2
Agriculture plus nonwork				
Mainly agriculture	27	4	64	4
Mainly nonwork	28	4	67	4
Agriculture plus nonfarm and nonwork				
Mainly agriculture	11	2	33	2
Mainly nonfarm	29	5	89	6
Mainly nonwork	12	2	30	2
No income or not reported	38	6	85	5
Family economic type				
Farm	143	23	365	23
Nonfarm	190	30	509	33
Farm-nonfarm	40	7	123	8
Semi-employment	103	16	256	16
Nonwork	153	24	322	20

ture. However, an actual decrease occurred in industrial and commercial activities, from 30 percent in 1956 to 23 percent in 1970. Farming as a part-time and residential practice appears to be gaining in aggregate economic activity; the farm-nonfarm family, only 7 percent of the 1956 sample households, now accounts for 30 percent of the households. Households on farms[25] decreased from 56 percent in 1956 to 47 percent in 1970. Decreases occurred in all farm types except part-time, which underwent a phenomenal increase from 14 in 1956 to 48 percent of all farms in 1970.[26]

In the underemployment aspect of resource utilization, it is striking to note the disappearance of semi-employed household types, which accounted for 16 percent of the households and working age population in 1956.

As a result of the shift over the 14-year period of approximately 10 percent of the population from farm to nonfarm residences, the working-age population is now nearly equally distributed between these household types.

Age of Individuals

The economic significance of age has institutional and physiological aspects. Society established various retirement ages, and physical ability discriminates against both the young and the elderly in occupational selection. Since the rural open-country Ozark region is characterized by neither young people nor young families, the age factor takes on added importance for development programs directed at the area. The adequacy of private pension, social security, and other programs designed to meet the needs of older people as they adjust to changing economic conditions will affect their economic capabilities and the area's economic progress in the years ahead.

Ozark family heads in the 55-year and older groups increased from 48 percent in 1956 to 52 percent in 1970 (Table 11). Older people are most numerous in the farm households, accounting for 75 percent of the heads 55 years or older today; the figure was 41 percent in 1956.

The complete disappearance of the semi-employed economic

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[25] A census farm may be either (1) a place of less than 10 acres from which sales of farm products amounted to $250 or more during the previous year, or (2) a place of 10 acres or more which sold $50 worth of produce, not including that from a home garden.

[26] A census Part-Time Farm is designated by sales of farm products of $250 to $1,999, operator worked 100 days or more off the farm, or nonfarm family income was greater than the value of farm sales. A Residential Farm has sales of less than $250. All others are considered Commercial Farms.

Table 11. Age Distribution of Household Heads and All Persons 14 Years and Over, by Family Economic Type, 1970 and 1956

Age (years)	All persons	Family economic type				
		Farm	Nonfarm	Farm-nonfarm	Semi-employed	Nonwork
				Percent		
1970 study						
All persons						
14 to 24	20	14	29	24	0	11
25 to 54	42	28	58	54	0	18
55 to 64	19	32	7	19	0	22
65 and over	19	26	6	3	0	49
Household heads						
14 to 24	2	0	4	3	0	1
25 to 54	46	25	77	64	0	17
55 to 64	24	43	11	28	0	17
65 and over	28	32	8	5	0	65
1956 study						
All persons						
14 to 24	27	26	35	32	25	11
25 to 54	14	12	18	17	14	10
55 to 64	45	50	44	44	44	38
65 and over	14	12	3	7	17	41
Household heads						
14 to 24	1	0	4	0	0	0
25 to 54	51	59	78	73	40	12
55 to 64	20	21	13	25	26	22
65 and over	28	20	5	2	34	66

type, reported primarily as elderly in 1956,[27] may indicate increasing geographic and social mobility as a result of the programs referred to earlier. While 59 percent of all individuals in the working-age population of the Ozark area in 1956 were 55 years or older, this number has dropped to 38 percent. In particular, for non-work households, individuals 55 years or older have decreased from 79 percent to 71 percent over the 14-year period.

Perhaps the outstanding fact concerning age and its relation to future economic progress is the 28 percent increase in the number of people in the 25- to 54-year age group, despite the overall trends of reduction in the young and the increase in retirement age people. This would seem important in evaluation of the industrial development potential for the 12-county area.

Educational Achievement

A high school education normally is required for most skilled labor in the United States; yet only 31 percent of the working age individuals in the sample reported a high school or better level of education (Table 12). This compares with a 1956 figure of 14 percent. The median educational level of the area's population remains low, reflecting the effects of high out-migration

[27] Metzler and Charlton, op. cit., p. 13.

Table 12. School Grades Completed by Persons 14 Years Old and Over, by Age, Sex, and Economic Type, 1970 and 1956

Economic type, age, and sex	All persons	Persons completing specified grades: Primary grades 0 to 3	Primary grades 4 to 7	Primary grades 8	High school 1 to 3	High school 4	College 1 to 3	College 4 and over	Median grade completed
	Number	*Percent*							*Number*
1970 study									
All persons	750	5	17	24	23	23	6	2	8.5
Age and sex									
Male	387	6	22	22	20	21	7	2	8.0
14-24 yr.	82	0	6	11	42	29	10	2	10.3
25 to 64	226	6	23	25	16	22	6	2	8.9
65 & over	79	12	34	29	11	9	5	0	8.1
Female	363	4	12	25	25	25	6	3	9.0
14-24 yr.	68	1	6	9	46	28	9	1	10.2
25 to 64	229	3	12	26	23	27	6	3	9.1
65 & over	66	9	23	35	11	14	3	5	8.5
Economic type									
Farm	144	4	16	30	22	18	7	3	8.0
Nonfarm	191	4	16	20	29	23	6	2	9.1
Farm-nonfarm	237	1	13	26	24	27	7	2	9.2
Semi-employed	0	0	0	0	0	0	0	0	....
Nonwork	178	11	26	20	15	20	5	3	7.7
1956 study									
All persons	1,562	5	26	37	18	9	4	1	8.5
Age and sex									
Male	788	7	28	36	16	8	4	1	8.4
14-24 yr.	151	1	18	31	32	11	6	1	9.0
25 to 64	467	5	27	39	14	10	4	1	8.5
65 & over	170	16	43	32	5	1	3	0	6.2
Female	774	3	23	39	21	9	4	1	9.6
14-24 yr.	158	0	8	19	56	15	2	0	10.2
25 to 64	493	2	25	45	13	9	5	1	8.5
65 & over	123	13	38	39	6	2	1	1	7.9
Economic type									
Farm	362	2	21	42	19	11	5	0	8.6
Nonfarm	506	2	19	39	23	12	5	0	8.7
Farm-nonfarm	122	7	25	37	20	6	4	1	8.5
Semi-employed	252	8	32	30	16	8	5	1	8.3
Nonwork	320	10	39	35	10	3	1	2	8.0

of young people, aged 14 to 24, whose educational achievement is the greatest of all age groups. Educational levels of area children leaving home since 1956 were as follows:

School grades completed	Males Number	Males Percent	Females Number	Females Percent
1 to 8	25	20	14	10
9 to 11	13	11	25	17
12	58	46	68	48
13 to 15	17	14	14	10
16	10	9	22	15
	123	100	143	100

The influence of the in-migration of retirement-aged individuals can be noted in the nonwork category. At the time of the

1956 survey, only 6 percent of the nonwork individuals had achieved a high school or better level; in 1970, 28 percent reported this achievement. The effect of such gain was not enough to offset the movement of less-educated people into the nonwork group, however, and its median grade reveals no change.

Level of Living

"Level of living" refers to the quality of cultural and material possessions that an economic unit is capable of affording. It is well documented that people suffering from very low levels of living, in relation to the rest of society, experience a "circular effect" through which their socioeconomic lag or gap is widened.[28] Rural areas in particular, with their surplus of unskilled labor, usually lag far behind in adequate living facilities and material possessions.

Housing as a major indication of an area's level of living has received a good deal of attention in recent years.[29] Statistics on national housing demonstrate a considerable variation among different geographic locations, as well as differences between urban and rural conditions.[30]

In the Ozark area, industrial growth and the decline of agriculture has produced a gradual improvement in rural open-country housing since the early 1950's. Luther Tweeten reported that rural houses with hot and cold water and complete bathroom facilities including bath and/or shower increased from 20 percent in 1950 to slightly more than 50 percent by 1960.[31]

As out-migration from the area continues, deteriorating and dilapidated houses are abandoned and remodeling or new construction by in-migrants and residual residents account for housing gains. However, the rural sector of the Ozarks remains well behind the nation as a whole.[32]

Table 13 indicates the changing physical characteristics of housing units in the 12-county area studied. Respondents were

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[28] See for example: Rufus B. Hughes, "Interregional Income Differences: Self-Perpetuating," Southern Economic Journal, Fall 1961, p. 28.

[29] Congress passed the "Housing and Urban Development Act of 1968" establishing a 10-year plan for improved housing by 1978. 91st Congress, 1st Session, House Document No. 91 to 93, U. S. Government Printing Office, 1969.

[30] Ronald R. Bird, Lucia Beverly, and Anne Simmons, "Status of Rural Housing in the United States," Agr. Econ. Report 114, p. 9, U. S. Government Printing Office, 1966.

[31] Luther G. Tweeten, "Rural Poverty: Incidents, Causes and Cures," Okla. Agr. Expt. Sta. Processed Series P-590, pp. 10 to 14, 1968.

[32] Hughes H. Spurlock, "Rural Housing Quality in the Ozark Region as Related to Characteristics of Housing Units and Occupants," Ark. Agr. Expt. Sta. Bul. 758, p. 5, 1970.

asked item by item how their housing compared to that 10 years ago. Although little change in construction features was noted, except for some disappearance of native stone as a material source, housing conditions improved. Of the 313 households interviewed, 70 percent reported inside hot and cold running water compared with only half of the same households in 1960. Sixty-five percent of the households had complete bathrooms with inside toilet, bathtub, and/or shower, twice as many as in 1960.

Improvements in household heating and lighting are closely tied to improved family incomes. Wood stoves, candles, and oil

Table 13. Rural Housing Conditions Reported, 1970 and 1960[1]

Housing characteristic	Households reporting			
	1970		1960	
	No.	*%*	*No.*	*%*
Construction features				
Vertical boards and batten	11	4	11	5
Vertical boards without batten	11	4	10	5
Horizontal boards, overlapped, painted	100	33	811	38
Horizontal boards, overlapped, unpainted	25	8	17	8
Asphalt siding	81	27	54	25
Stone, block, or brick	26	8	30	14
Asbestos siding	13	4	6	3
Aluminum and other	34	11	7	3
Structural soundness				
New appearance	63	20	16	3
Average or above	157	51	137	65
Deteriorating or dilapidated	88	29	68	32
Less than four rooms	24	8	28	13
Inside water and water supply				
No inside water	63	20	75	33
Cold water only	30	10	38	17
Hot and cold	219	70	112	50
Drilled wells	216	70	143	60
Dug well or cistern	52	17	58	25
Spring or hauled water	43	13	30	15
Bathroom facilities				
No facilities	94	30	107	48
Toilet and bathtub	96	31	59	13
Toilet, bathtub, and shower	105	34	46	20
Heating				
No heating in house	1	....	19	8
Central heating	40	13	18	8
Floor furnace or room units (gas)	122	40	51	23
Wood stove	134	43	133	59
Lighting				
Electricity	310	99	218	70
Other or none	3	1	95	30
Preliminary housing index score				
Less than 30	42	13	50	22
30 to 49.9	50	16	61	27
50 to 69.9	67	22	42	18
70 to 89.9	115	37	59	26
90 to 100	38	12	15	7

[1] Details of housing and cultural possessions for sample households were not available in the 1956 study. The 1970 respondents were asked to report on the presence or absence of each trait of the dwelling occupied 10 years ago.

lamps have gradually given way to butane and electricity. Electricity as a source of heating and/or lighting now is used in 99 percent of the sample households, while 70 percent usage was recorded 10 years ago. Butane heating units have approximately doubled, to 40 percent of sampled households, and houses without any source of heating have practically disappeared.

To provide a generalized analysis of improved housing characteristics, a preliminary housing index was constructed and applied to the information on the sample households. To rectify variation in reported items and to arrive at a comparable rating for each residence, the initial score was divided by the maximum score possible in the particular instance, and the result was multiplied by 100. (A final score of 70 for housing characteristics is therefore 30 percent lower than the possible score if full scale weightings had applied.)

While, in 1960, only 33 percent of the sample households had a score of 70 or more, by 1970, 49 percent of the sample households were capable of such a rating. Of the remaining households, the lack of inside water and plumbing facilities essentially limits those improvements considered necessary for standard sanitation and health in the nation as a whole. Efforts directed toward continued improvement of rural housing must cope with the problem of adequate water supply and provide rural families with the opportunity to install adequate internal plumbing.

A second indicator of level of living in an area is the proportion of its households having certain material and cultural possessions. The level-of-living items chosen for inclusion in the interview schedule were intended to describe the changing socioeconomic conditions of rural families by examining five major aspects of modern living. The items (Table 14) can be reorganized into items of communication, transportation, food preparation and preservation, household management, and leisure. In each of these categories, progress, or the lack of it, has important sociological and economic implications in determining family well-being.

Ninety-one percent of the households reported owning a television set, and weekly newspapers or magazines are now reaching at least half of the families in the area.

Home management items such as washing and sewing machines have increased by approximately 20 percent over the period, probably reflecting the increase in nonfarm employment of women reported in the following section.

The ownership of freezers may be taken as a significant in-

dication of improvement in real income. The significant amount of home-use production usually pointed to in distinguishing rural and urban poverty differentials is terminal at some point without the introduction of modern food-preservation technology.

When families were ranked on the basis of their possession of the items considered, 52 percent of the households owned or received 60 percent or more of the items today, compared with 24 percent in 1960. This would seem to reflect improved family income in the 1970 sample.

Occupational Characteristics of the Sample Households

The Bureau of the Census questions a sample of the United States population 16 years old and over each month regarding work activity during the past week. On those individuals reporting

Table 14. Household and Cultural Possessions, 1970 and 1960[1]

Item and grouping	Households reporting			
	1970		1960	
	No.	*%*	*No.*	*%*
Material possessions				
Automobile	197	63	149	53
Pick-up truck	209	67	164	58
Boat	62	20	26	9
Radio	276	89	248	89
Record player or tape	137	44	73	26
Television	282	91	183	65
Telephone	230	74	123	46
Refrigerator	288	93	241	86
Vacuum cleaner	190	61	114	41
Kitchen range	295	95	200	71
Washing machine	244	78	162	58
Sewing machine	174	56	93	33
Kitchen sink	269	87	189	67
Freezer	224	72	110	39
Air conditioner	62	20	26	9
Clothes dryer	67	22	27	8
Cultural possessions				
Medical or health insurance	165	53	151	53
Farm or trade journal	152	49	129	45
Other magazines	161	52	108	38
Daily newspaper	96	31	79	28
Weekly newspaper	176	56	111	39
Agricultural bulletins	38	12	19	7
Preliminary possessions index score				
Less than 20	7	2	20	7
20 to 29.9	18	6	40	14
30 to 39.9	29	9	56	20
40 to 49.9	40	13	49	17
50 to 59.9	58	19	49	17
60 to 69.9	61	20	38	13
70 to 79.9	52	17	22	8
80 to 100	47	15	8	3

[1] See footnote, Table 13.

work, information is recorded as to the type of work and the number of days employed. This information is compiled by the Bureau of Labor Statistics into monthly figures on employment and unemployment for members of the labor force. At the end of each year, annual averages are determined. According to the 1969 summary, 85 percent of the men and 53 percent of the women 16 years old and over had work experience during the year.[33] The Department of Labor also indicates that, for the United States as a whole, the proportion for male employees has remained unchanged over the past five years, while that of females has increased by about 4 percent.

The data obtained in the present study are not exactly comparable with the census figures. As a result of the methodological constraints of the study, it was necessary to include all persons 14 years and older engaged in some gainful work during 1969. An even more important limitation is the fact that Ozark individuals were called on only once, and were requested at that time to relate their work experiences for the entire preceding year. Nevertheless, a reasonably close approximation of the results should occur.

Sixty-three percent of the Ozark area's males and 47 percent of the females 14 years old and over reported work experience during the year preceding the survey. Although figures are not strictly comparable it appears that gainful workers in the Ozarks comprise a significantly smaller proportion of the working-age population, both men and women, than in the nation at large.

Much of the difference between nonworkers in the nation and in the Ozark area can be attributed to the large proportion of elderly, retired, and disabled people in the area. The out-migration of younger workers, who usually participate more in the labor force, also accounts for part of the variation.

Major Activity in Last 12 Months

As a preliminary effort to differentiate people largely in the labor force from housewives, school children, retired, and disabled individuals, the survey instrument requested information regarding the major activity of each household member during the preceding year. Among both males and females in the 14 to 24 age group, the trend is to stay in school (Table 15). This was especially true for males, whose numbers increased from 54 percent in 1956 to 63 percent of the present sample, reversing a long-existing

[33] Data from "Advance Summary: Work Experience of the Population in 1969," Special Labor Force Report, U. S. Bur. Labor Statistics, p. 1, 1970.

trend among Ozark area school-age children. The number of females reportedly in school has decreased slightly, apparently in favor of nonfarm employment which, for this age group, increased from 4 percent to 16 percent during the period studied.

Adult males (ages 25 to 64) had left farming operations in favor of nonfarm work, which increased from 39 to 52 percent of the age group's major activity. A more significant change for this age group was among females. The number of women reporting housework as their major activity decreased by 20 percent and nonfarm work had grown from 9 to 28 percent of the activity of adult women.

Among elderly males and females 65 years and over, more report retirement as their major activity today. This may indicate improved financial security. However, 4 percent of the men and 5 percent of the women in this age group are reportedly seeking

Table 15. Major Activity of Persons 14 Years Old and Over, During Previous 12-Month Period, by Age and Sex, 1970 and 1956

Major activity	All persons	Sex and years of age					
		Male			Female		
		14 to 24	25 to 64	65 and over	14 to 24	25 to 64	65 and over
	No.			*Number*			
1970 study							
All persons	750	82	226	80	68	229	65
				Percent			
Operating farm	105	2	34	26	1	2	2
Farm wage work	1	0	...[1]	0	0	0	0
Nonfarm work	212	23	52	3	16	28	2
In armed forces	4	5	0	0	0	0	0
Unpaid family work	2	0	0	0	0	1	0
Looking for work	18	5	1	4	3	1	5
Going to school	94	63	...[1]	0	62	0	0
Keeping house	181	1	...[1]	0	15	61	44
Retired	87	0	4	52	0	4	41
Totally or partially disabled	46	1	9	15	3	3	6
				Number			
1956 study							
All persons	1,575	151	470	175	158	496	125
				Percent			
Operating farm	276	4	42	31	0	2	3
Farm wage work	30	3	5	1	1	...[1]	0
Nonfarm work	276	21	39	5	4	9	0
In armed forces	6	2	1	0	0	0	0
Unpaid family work	41	12	1	0	5	2	0
Looking for work	8	3	...[1]	0	1	...[1]	0
Going to school	191	54	0	0	67	0	0
Keeping house	477	0	1	0	21	81	37
Retired	122	0	4	30	0	3	29
Totally or partially disabled	148	1	7	33	1	3	31

[1] Less than 0.5 percent.

Table 16. Type of Employment Reported During Past Year of Persons 14 Years Old and Over, by Sex, 1970 and 1956

Type of employment	All persons[1]		Male		Female	
	No.	*%*	*No.*	*%*	*No.*	*%*
1970 study						
All workers	412	100	243	100	169	100
Type of employment						
Work on home farm	253	61	157	65	96	57
Work home farm only	165	40	88	36	77	46
Work on and off farm	88	21	69	29	19	11
Farm wage work	7	2	6	3	1	1
Farm wage work only	2	1	2	1	0	0
Farm wage and other work	5	1	4	2	1	1
Nonfarm work	253	61	162	67	91	54
Nonfarm work only	165	40	92	38	73	43
Nonfarm and other work	88	21	70	29	18	11
1956 study						
All workers	934	100	600	100	334	100
Type of employment						
Work on home farm	648	69	408	68	240	72
Work home farm only	410	44	220	37	190	57
Work on and off farm	238	25	188	31	50	15
Farm wage work	119	13	53	9	66	20
Farm wage work only	67	7	33	6	34	10
Farm wage and other work	52	6	20	3	32	10
Nonfarm work	396	43	316	53	80	24
Nonfarm work only	193	21	135	23	58	17
Nonfarm and other work	203	22	181	30	22	7

[1] Main categories in table overlap, so figures are not additive.

employment, representing a new condition for the area.

It is noteworthy that, for both males and females 65 and older, the number of disabled individuals has significantly decreased.

Type of Employment

Fifty-five percent of the 750 persons 14 years old and over in the sample reportedly worked at some time during the 12 months preceding the interviews in 1970. Of the 412 workers, 59 percent were male and 41 percent female. The most surprising trend for the area is the number of workers engaged in more than one employment activity. Multiple employment among area household heads remains much higher (28 percent) than the 16 percent estimate reported for the entire Ozark region by Hoover and Green.[34] It appears that the farm-nonfarm economic type has created dual-occupationists among area residents. Table 16 shows the distribution of reported types of employments by all workers in the area.

While 13 percent of the labor force were engaged in farm

[34] Hoover and Green, op. cit., p. 13.

wage work in 1956, the number had dropped to 2 percent in 1970. This indicates the changing nature of farm enterprise in the area and the disappearance of migratory workers among the Ozark people. The greatest change in individuals doing farm work for wages was among women. In 1956, 20 percent of the female labor force were so engaged, compared with only 1 percent today.

The number of informants reporting nonfarm employment has increased from 43 percent of the labor force to 61 percent. Female workers changed most, from 24 percent in 1956 to 54 percent, while male employees reporting nonfarm employment increased from 53 to 67 percent.

The attraction of improved wage and employment conditions in the Ozarks is indicated by the increased number reporting "nonfarm work only" as the major employment. While only 21 percent of the 1956 labor force were sustaining a living from this source of employment, the number had risen to 40 percent in the present study. Of male workers reporting nonfarm work only, approximately one-fourth owned or operated their own business. These were primarily grocery stores, service stations, and logging or timber operations.

Business and "other manufacturing" have replaced sawmilling as the major source of nonfarm employment (Table 17). The

Table 17. Type of Nonfarm Employment Reported During Past Year of Persons 14 Years Old and Over, by Sex, 1970 and 1956

Type of nonfarm employment	All persons		Male		Female	
	No.	*%*	*No.*	*%*	*No.*	*%*
1970 study						
All persons	750	100	388	100	362	100
All workers	412	55	243	63	169	47
Type nonfarm employment[1]	223	54	136	56	87	51
Sawmilling	27	7	27	11	0	0
Other manufacturing	49	12	22	9	27	16
Construction	28	7	26	11	2	1
Mining	0	0	0	0	0	0
Business	82	20	45	19	37	22
Transportation	6	1	6	2	0	0
Government	17	4	8	3	9	5
Service work	14	3	2	1	12	7
1956 study						
All persons	1,575	100	796	100	779	100
All workers	934	59	600	75	334	43
Type nonfarm employment[1]	396	43	316	53	80	24
Sawmilling	124	13	122	20	2	1
Other manufacturing	64	7	35	6	29	9
Construction	52	6	52	9	0	0
Mining	16	2	10	2	6	2
Business	52	6	29	5	23	7
Transportation	26	3	25	4	1	0
Government	30	3	22	4	8	2
Service work	32	3	21	3	11	3

[1] Nonfarm workers classifiable by industry.

number of men engaged in sawmilling decreased from 20 percent to 11 percent. Business, including both wholesaling and retailing, increased from 5 percent for males in 1956 to 19 percent in 1970 and from 7 percent to 22 percent for females.

Duration of Employment

For several decades, the major economic problem in the Ozark area was described as low incomes stemming from lack of adequate employment opportunities or "underemployment." Until the past decade, most government policy programs concerned with labor resource utilization concentrated on this aspect. Since the publication of the 1956 study, however, government economists concerned with area redevelopment have attempted to relate income distribution and resource utilization among segments of the population. This orientation has led to the realization that the low-income problem is not merely one of persons without jobs; thus, unemployment is clearly a poor indicator of labor market conditions for deprived areas.[35] The low income levels throughout the South, for example, have not been associated with unemployment rates noticeably higher than for the nation generally.[36]

The changing focus of federal government concern for labor resource use is now in the direction of "unused manpower," or underemployment.[37] Both the 1956 and the 1970 studies were designed to determine the number of underemployed individuals in the 12-county area and to assess available manpower reserves relative to improved employment, growth, and development.

While underemployment has several facets, working days lost over the period of a year as a result of labor utilization patterns represent a clearly identifiable aspect of the problem. The number of days an individual is able to work within a year's time is especially critical for families in economically deprived areas with low industrial development potential. Their hope for improved incomes may lie in the economic process of outmigration, through which the number of labor force participants is reduced, thus increasing the man-days demanded of the residual residents by the area labor market.

Eighty-five percent of the households in the Ozark area can

[35] U. S. Department of Commerce, Area Redevelopment Administration, "Annual Report on the Area Redevelopment Administration of the U. S. Department of Commerce, 1963: Economic Growth in American Communities," U. S. Govt. Printing Office, p. 7, 1963.

[36] Jacob Wincer, "Labor-Force Participation and Underemployment: A Review of Recent Evidence," Prosperity and Unemployment, ed. Robert Aaron and Margaret S. Gordon, John Wiley and Sons, Inc., N.Y., pp. 102 to 105, 1966.

[37] U. S. Department of Labor, Manpower Report of the President, April, 1967, U. S. Govt. Printing Office, 1967.

Table 18. Duration of Employment During the Year for Persons 14 Years Old and Over, by Household Status, 1970 and 1956

Household status	All persons	Worked during year	Worked during year					
			Total persons	Days of reported work				Av. length of employment
				1 to 49	50 to 99	100 to 199	200 or more	
	No.	*%*	*No.*	*Percent*				*Days*
1970 study								
Male	386	63	245	3	8	20	69	232
Head	289	72	207	2	5	18	75	253
Sons	92	40	37	5	24	27	44	174
Other	5	20	1	0	100	0	0	74
Female	364	46	167	4	13	28	55	214
Head	24	25	6	0	0	33	67	241
Wives	270	55	148	5	10	29	56	217
Daughters	57	18	10	0	50	20	30	99
Other	13	23	3	0	33	0	67	229
1956 study								
Male	796	75	600	14	17	30	39	173
Head	590	79	464	9	15	31	45	192
Sons	155	74	114	33	25	26	16	107
Other	51	43	22	23	27	23	27	124
Female	779	43	334	52	24	10	14	83
Head	39	33	13	31	31	7	31	193
Wives	541	45	244	50	22	13	15	86
Daughters	148	44	65	60	31	3	6	56
Other	51	24	12	84	8	0	8	50

be classified as either complete families (head and homemaker with or without children) or extended families including additional relatives. The participation of families in labor market activities has undergone considerable adjustment since 1956, as portrayed by Table 18.

The greatly improved employment condition (number of days worked) for household heads and their wives has had its effect on the number of children and other household members required to work. While 74 percent of the sons and 44 percent of the daughters were working in 1956, these numbers decreased to 40 percent and 18 percent, respectively, although those who are working today are employed approximately two months longer than in 1956. The increasing numbers of sons and daughters in school (Table 15) tend to substantiate this fact.

The number of male and female household heads employed during the previous year has decreased over the 14-year period. This is related to the increasing number of retired families locating in the area. The median age of household heads rose from 53 years in 1956 to 56 years in the present sample. Nevertheless, the employment of household heads, an average of 253 days for males and 241 days for females, closely approaches the full-time employment norm of 260 days (based on a five-day week) per

Table 19. Duration of Employment During the Year for Persons 14 Years Old and Over, by Chief Activity, 1970 and 1956

Chief activity	All persons	Worked during year	Total persons working	Days worked during year				
				1 to 49	50 to 99	100 to 199	200 or more	Average
	No.	*%*	*No.*	*Percent*				*Days*
1970 study								
All persons	750	55	412	3	10	23	64	222
Chief activity								
Farm operation	105	89	93	4	9	20	67	195
Farm wage work	1	100	1	0	0	100	0	180
Nonfarm work	212	92	194	2	4	1[illegible]	193	255
Armed forces	4	0	0	0	0	[illegible]	0	0
Unpaid family work	2	50	1	0	0	[illegible]	100	200
Looking for work	18	17	3	0	0	3[illegible]	67	180
Going to school	94	24	23	0	52	3[illegible]	9	110
Keeping house	181	46	83	4	13	45	38	135
Retired	87	11	10	20	20	50	10	112
Disability	46	9	4	25	25	25	25	105
1956 study								
All persons	1,575	59	934	27	20	23	30	141
Chief activity								
Farm operation	276	94	260	10	20	42	28	166
Farm wage work	30	100	30	10	23	30	37	172
Nonfarm work	276	98	270	2	7	23	68	231
Armed forces	6	67	4	0	50	25	25	171
Unpaid family work	41	83	34	44	35	12	9	76
Looking for work	8	75	6	33	50	17	0	52
Going to school	191	46	87	60	31	8	1	51
Keeping house	477	43	204	63	24	10	3	53
Retired	122	12	15	80	13	0	7	45
Disability	148	16	24	50	42	8	0	54

year used for census purposes.[38] Underemployment of male and female workers in the Ozark area is still an important problem.

The average employment of area males has increased from 173 days to 232 days. The really significant change is in the average number of days worked by female members of the area's labor force. While approximately the same percentage of females were working in 1956, the average duration of employment was 83 days, compared with 214 days in the present sample. This represents an important improvement in family income and, since more than half of the working females are from farm-operator families, means that much needed improvements in farm enterprise may now be afforded.

Of all individuals considered at working age for the purposes of this study, 55 percent were employed for some time during 1970, compared with 59 percent in 1956 (Table 19).

The increase in the average number of days employed for all workers from 141 to 222 reflects increased duration of employment by people in all major categories. This figure is low com-

[38] U. S. Department of Labor, op. cit., p. 4.

pared with the 260-day norm because some groups in the survey were in the labor force only part of the time. Yet members of these groups managed to more than double lengths of employment during the period studied. Housewives working either on their home farm or at a nonfarm job increased their length of employment from 53 to 135 days, on the average. Working school youth, who reported an average of 51 days in 1956, worked 110 days during 1970. Retired individuals, in a majority of cases, raised large gardens and kept some livestock on their places, for which they reported an average of 112 days of labor, compared with the much lower 45-day average reported by 1956 sample members. Those with partial disabilities were able to work an average of 51 days longer than in 1956.

Ozark area workers who were in the labor market for the full year remained underemployed. Among farm operators, the average of 195 days compares favorably with the 1956 average of 166 days, but still is below full utilization. However, one-third of the farm operators are over 65 years of age (Table 15), and these operators accounted for all those reporting less than 200 days. The remaining two-thirds averaged closer to 240 days of employment. Also, the number of days of employment does not fully recognize these households' entire economic activities. Metzler and Charlton characterized the mode of life for native "hill farmers" as somewhat diversified, including hunting, fishing, berrying, odd-jobbing, and subsistence gardening-canning.[39]

Nonfarm workers reported an average of 255 days work, compared with 231 days in the earlier study; this is very near full employment.

The changing nature of underemployment in the rural Ozarks is better revealed by duration of employment in relation to industry and age group (Table 20). Except for agriculture and the timber industry, in which young people play an important part, the employment of adult workers aged 25 to 64 represents most accurately the condition of the labor market in the area.

The effects of increasing size of area farms and the shift in farm enterprises toward dairy, beef, and broiler production (Table 3) show up in the number of farm operators and their wives reporting approximately full employment. Half of the adult males employed in agriculture worked 267 days or more, while females reported 249 days in over half of the cases. These changes nearly equalize farm and nonfarm employment patterns throughout the area.

[39] Metzler and Charlton, op. cit., p. 27.

Manufacturing employment by those firms covered by the Arkansas Employment Security Law increased from 2,796 employees in 1956 to 6,614 employees in 1968 for the 12-county area.[40] This more than doubling of all manufacturing employment is

Table 20. Duration of Employment During the Year for All Workers 14 Years Old and Over, by Industry, Sex, and Age, 1970 and 1956

Industry and age group	All workers	Days worked during year: Less than 100	100 to 199	200 to 249	250 & over	Median duration of employment
	Number		*Percent*			*Days*
1970 study						
All	412	13	23	15	49	247
Agriculture						
Males: 14 to 24 years	3	0	67	0	33	174
25 to 64 years	66	6	23	12	59	267
65 years & over	12	33	33	17	17	149
Female: 14 to 24 years	0	0	0	0	0	0
25 to 64 years	10	20	20	10	50	249
65 years & over	2	100	0	0	0	50
Construction						
Males: 25 to 64 years	23	9	35	21	35	214
Timber and lumber						
Males: 14 to 24 years	4	0	0	25	75	288
25 to 64 years	23	0	26	26	48	245
Manufacturing						
Males: 25 to 64 years	23	0	13	13	74	287
Female: 25 to 64 years	23	4	13	35	48	246
Transportation						
Males: 24 to 64 years	6	0	33	17	50	249
Commercial						
Males: 25 to 64 years	26	0	19	19	62	271
Female: 25 to 64 years	26	8	15	31	46	243
Services						
All: 25 to 64 years	14	0	21	7	72	284
Government						
All: 25 to 64 years	15	7	40	13	40	212
Other						
All: 25 to 64 years	6	0	17	50	33	232
1956 study						
All	934	47	23	10	20	112
Agriculture						
Males: 14 to 24 years	64	81	16	0	3	61
25 to 64 years	166	31	40	11	18	146
65 years & over	56	62	23	11	4	79
Female: 14 to 24 years	54	94	6	0	0	52
25 to 64 years	180	88	9	2	1	56
65 years & over	21	86	9	0	5	58
Construction						
Males: 25 to 64 years	41	17	22	24	37	222
Timber and lumber						
Males: 14 to 24 years	24	29	46	12	13	144
25 to 64 years	94	13	31	23	33	213
Manufacturing						
Males: 25 to 64 years	24	8	38	12	42	216
Female: 25 to 64 years	27	48	15	7	30	112
Transportation						
Males: 25 to 64 years	23	4	26	35	35	227
Commercial						
Males: 25 to 64 years	23	4	18	4	74	287
Female: 25 to 64 years	15	7	7	26	60	268
Services						
All: 25 to 64 years	30	16	10	7	67	278
Government						
All: 25 to 64 years	28	11	28	7	54	257
Other						
All: 25 to 64 years	11	18	27	18	37	212

[40] U. S. Department of Commerce, Bureau of the Census, County and City Data Book 1969, U. S. Govt. Printing Office, 1969.

related to the doubling of rural open-country adults reporting such employment experience over the period studied. Since 1956, manufacturing employment has greatly improved the average number of days of employment, so that half of the employed males aged 25 to 64 reported 287 days and more. For adult female employees, the average of 246 days of work in manufacturing in 1970 was more than twice as many days as so employed in 1956.

The highly seasonal timber and lumber industry has realized greater stability and longer periods of employment for its workers as a result of the strong demand for construction material throughout 1960's.

The number of days male and female workers were employed per year in commercial industry decreased slightly since 1956. However, in both 1956 and 1970 days worked in commercial industry were relatively high among industry types reported by workers.

Although no real yardstick is available to measure the absolute degree of underemployment among rural open-country adult workers, half of these labor-force participants are working less than the 260-day norm applied by census officials at the Department of Labor. For the nation generally, 88 percent of the men and 69 percent of the women were employed full-time during 1969.[41]

Availability for Employment

While considerable underemployment was characteristic of farm households and young people in the Ozark area, few indicated an interest in obtaining better or more regular employment. Of the 5 percent of all workers who reportedly were available for work, only 2 percent indicated concern about better jobs (Table 21). Two-thirds of the persons available for work were female workers, and half of the persons seeking work were female.

Area unemployment is indicated by the number of individuals who were looking for work during the week prior to the interview. Only 2 percent reportedly were out of a job and actively looking for employment, compared with 3 percent in the 1956 sample. Unemployment of male labor force participants from 14 to 24 years of age decreased from 31 percent in 1956 to 5 percent in 1970. Only 3 percent of male household heads, compared with 11 percent in 1956, were unemployed.

[41] U. S. Department of Labor, op. cit., p. 4.

Table 21. Individuals Available for Work and Seeking Work, by Sex, Age, Household Status, and Family Economic Type, 1970 and 1956

Group	All persons	Persons available for work			
		All persons		Persons seeking work	
	No.	*No.*	*Percent*	*No.*	*Percent*
1970 study					
All	750	39	5	13	2
Sex and age					
Male	387	14	4	7	2
14 to 24 years	82	4	5	4	5
25 to 64 years	226	9	4	2	1
65 years and over	79	1	1	1	1
Female	363	25	7	6	2
14 to 24 years	68	6	9	2	3
25 to 64 years	229	19	8	4	2
65 years and over	66	0	0	0	0
Household status					
Male heads	289	10	3	4	1
Other males	98	4	4	3	3
Females	363	25	7	6	2
Family economic type					
Farm	144	1	1	0	0
Nonfarm	191	19	10	6	3
Farm-nonfarm	237	13	5	6	3
Semi-employment	0	0	0	0	0
Nonwork	178	6	3	1	1
1956 study					
All	1,575	188	12	46	3
Sex and age					
Male	796	107	13	35	4
14 to 24 years	151	47	31	21	14
25 to 64 years	470	58	12	14	3
65 years and over	175	2	1	0	0
Female	779	81	10	11	1
14 to 24 years	158	34	22	6	4
25 to 64 years	496	47	9	5	1
65 years and over	125	0	0	0	0
Household status					
Male heads	590	62	11	15	3
Other males	206	45	22	20	10
Females	779	81	10	11	1
Family economic type					
Farm	365	23	6	3	1
Nonfarm	509	85	17	23	4
Farm-nonfarm	123	21	17	1	1
Semi-employment	256	40	16	13	5
Nonwork	322	19	6	6	2

More than anything else, Table 21 indicates the significantly improved satisfaction of workers with their present employment. The percentages of availability in all age groups have decreased from the 1956 proportions. This would imply greater labor force command by the area residents, as well as increased knowledge of job opportunities, contacts, and outlets, compared with the situation at the beginning of the period.

Household and Personal Incomes

The rural area of north-central Arkansas has long received the attention of economists and sociologists as a result of par-

Table 22. Households in the Ozark Area with 1956 and 1970 Incomes of Stated Amounts, by Residence and Family Economic Type

Household income	All households reporting	Households with incomes of stated amounts								
		All households	Farm or nonfarm residence			Family economic type				
			Commercial farms	Part-time or residential farms	Nonfarm	Farm	Nonfarm	Farm nonfarm	Semi-employment	Nonwork
	Number		*Number*					*Number*		
1956 income[1]										
Households reporting	605[2]	605[3]	207	100	275	136	183	37	100	149
			Percent					*Percent*		
Less than $500	106	18	15	12	21	15	3	8	22	37
$500 to $999	148	24	21	23	29	23	8	19	36	40
$1,000 to $1,499	108	18	21	23	15	24	20	19	18	10
$1,500 to $1,999	70	12	11	14	10	10	17	16	10	6
$2,000 to $2,999	73	12	16	8	9	13	20	16	8	3
$3,000 and over	100	16	16	20	16	15	32	22	6	4
	Dollars		*Dollars*					*Dollars*		
Av. household income	1,664	1,664	1,714	1,896	1,504	1,711	2,425	2,061	1,268	851
	Number		*Number*					*Number*		
1970 income[1]										
Households reporting	313	313	69	77	167	60	72	92	0	89
			Percent					*Percent*		
Less than $500	4	1	1	3	1	5	0	0	0	1
$500 to $999	8	2	0	3	4	2	1	1	0	6
$1,000 to $1,999	43	14	9	1	21	13	4	1	0	36
$2,000 to $2,999	47	15	19	8	17	20	7	3	0	30
$3,000 to $4,999	70	23	28	17	22	25	24	23	0	19
$5,000 to $6,999	65	20	19	33	16	19	31	32	0	3
$7,000 to $9,999	50	13	14	26	12	8	22	30	0	1
$10,000 and over	26	8	10	9	7	8	11	10	0	4
	Dollars		*Dollars*					*Dollars*		
Av. household income										
Unadjusted	4,680	4,680	4,474	6,077	3,632	3,800	5,908	6,724	....	2,259
Adjusted to 1955-56 dollars[4]	(3,345)	(3,345)	(3,198)	(4,344)	(2,596)	(2,716)	(4,223)	(4,806)	—	(1,614)
	Percent		*Percent*					*Percent*		
Increase, 1956 to 1970	101	101	86	129	72	58	74	133	....	89

[1] Household income for the year covers the 12 months preceding the interviews in late spring of 1956 and 1970.
[2] Income not reported for 24 of 629 households in 1956.
[3] Twenty-three of 605 families reporting income in 1956 did not report type of residence.
[4] Numbers in parentheses represent conversion to the 1955-56 price level of the 1969-70 income figures. The index figures for consumer price changes reported by the Bureau of Labor Statistics, U.S. Department of Labor, are as follows: 1955 and 1956: 93.3 and 94.7; 1969 and 1970: 127.7 and 135.3. Therefore the 1970 income figures are reduced by 28.517 percent in converting to the 1955-56 purchase value of the dollar.

ticular employment characteristics and income conditions. Varden Fuller has stated that these employment and income conditions "cause or reinforce poverty everywhere," and "come together in a maximum likelihood combination in rural areas."[42] For the year 1959, median family income for the nation was $5,660, with 21 percent of the families receiving less than the $3,000 poverty level; this compared with $2,162 for the Ozark area with 67 percent of families below the poverty line.[43] The 12-county area of this study was included in the Ozark region delineated under the provisions of the Public Works and Economic Development Act of 1965.[44]

Household Incomes in the Ozark Area

The changing household income position of area residents is presented in Table 22. For all households, average income for the 12 months preceding the survey in 1956 was $1,664, considerably less than the present average of $4,680 in money terms. To provide a clearer indicator of relative income position in the two samples, a consumer price index was applied (see footnote to table). By this process, the reported $1,664 income for 1956 can be compared to a 1970 income of $3,345 in the money value of 1956. Thus, the change from 1956 to 1970 for all households after accounting for inflation is a 101 percent increase. Not all households, however, shared in this change.

A distribution of households by the nature of their residence reveals that strictly nonfarm households have not realized the income growth of commercial and part-time or residential farms.

A clearer understanding can be realized by examining a family's major time-effort distribution which leads to the classification by economic type. When nonfarm is divested of the nonwork cases included as nonfarm in the residence section of Table 22, income of the households devoting major work to nonfarm enterprise or employment is much higher. The nonfarm household has the second highest real income position of area family economic types. Nonwork households still are affected with low incomes, even though they have realized an 89 percent increase in real income over the period of study. Farm incomes have risen to slightly above the $3,000 subsistence level that is applied by the Council of Economic Advisors. However, this represents the smallest net gain of any group since 1955.

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[42] Varden Fuller, "Rural Poverty and Rural Development Areas," Poverty in America, ed. Margaret S. Gordon, Chandler Publishing Co., San Francisco, p. 390, 1965.

[43] U. S. Census of Population, 1960, Arkansas, General Social and Economic Characteristics, Tables 65 and 86.

[44] Public Law 89-136, 89th Congress, S.1648, August 26, 1965.

The farm-nonfarm households show greatest improvement. A typical example of such households would be the small farm which has one or more of its member employed at a nonfarm job. In many cases, female members work off the farm and the male head, who may have had to take nonfarm work in the past, has now returned to his farm. The farm-nonfarm household increased its income from $2,061 in 1956 to $6,724 today—or, in real income, by 133 percent.

Affecting incomes of all farm-related households is the fact that the cattle market has been unusually renumerative the last few years. Since production of beef cattle has replaced cropping for the majority of Ozark farmers, income from "farming" activities was much higher for 1969 and 1970. Nevertheless, today's higher incomes may lead to improvements resulting in higher "usual" incomes in the future.

Nonwork Sources of Income

Two-thirds of the households now receive income from nonwork sources, compared with half in 1956. Social security payments were reportedly received by 33 percent of all households, an important increase over the 5 percent in 1956 (Table 23). Social security payments, averaging $1,180, represent a substantial monetary contribution to the local community in terms of regularity of income and the number of recipients.

Approximately 1 in 8 families receive assistance from the State Welfare Department and 1 in 10 receive incomes from various retirement funds. Relatively little change in these groups has taken place since 1956.

Unemployment insurance and workman's compensation payments decreased from 4 and 2 percent, respectively, to 1 percent each, reflecting improved utilization of labor in the area.

Individual Earnings

The importance of nonfarm income can be made more specific by examining the age and sex distributions of workers reporting such work (Table 24). Of all such workers, only 9 percent earned $3,000 or more in 1956, compared with 56 percent in the present study. These percentages are somewhat deceiving in terms of real income. The $3,390 median income of all workers in 1969 represents $2,419 in 1956 dollars, a 153 percent improvement over 1956 earnings.

Table 23. Households Reporting Sources of Nonwork Income in 1970 and 1956, by Family Economic Type

Family economic type	Households reporting			Households receiving nonwork income from											
	Income	Nonwork income		Rent or royalty		State welfare		Retirement funds		Social security		Unemployment insurance		Workman's compensation	
	No.	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
1970 income															
All households	313	213	68	28	9	44	14	31	10	104	33	4	1	2	1
Farm	60	48	80	7	12	8	13	6	10	27	45	0	0	0	0
Nonfarm	72	29	40	5	7	6	8	7	10	10	14	1	1	0	0
Farm-nonfarm	92	28	30	5	5	1	1	7	8	11	12	3	3	1	1
Semi-employed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nonwork	89	108[1]	121	11	12	29	33	11	12	56	63	0	0	1	1
1956 income															
All households	605	306[2]	51	66	11	78	13	53	9	29	5	24	4	13	2
Farm	136	38	28	16	12	3	2	5	4	2	1	2	1	1	1
Nonfarm	183	72	39	23	13	8	4	6	3	3	2	12	7	5	3
Farm-nonfarm	37	13	35	3	8	1	3	1	3	2	5	3	8	0	0
Semi-employed	100	52	52	8	8	9	9	13	13	7	7	4	4	5	5
Nonwork	149	131	88	16	11	57	38	28	19	15	10	3	2	2	1

[1] Includes households with more than one kind of nonwork sources.

[2] Includes 43 households not reporting source of nonwork income.

Table 24. Persons Reporting Amounts of Earnings in 1970 and 1956 at Nonfarm Work During the Year, by Age and Sex

Age and sex	Persons reporting nonfarm income	Persons who made							Median earnings in 1955-56 dollars[1]
		Under $500	$500 to $999	$1,000 to $1,999	$2,000 to $2,999	$3,000 to $4,999	$5,000 to $7,999	$8,000 and over	
	Number	*Percent*							*Dollars*
1970 earnings									
All workers	232	4	8	16	16	33	20	3	2,419[1]
Male workers	146	4	8	13	13	32	25	5	2,696
14 to 24 years	19	16	16	26	10	32	0	0	1,216
25 to 64 years	124	2	6	10	13	32	30	6	2,989
65 years and over	3	0	0	66	33	0	0	0	1,258
Female workers	86	4	9	20	20	36	10	0	2,031
14 to 24 years	9	11	11	22	22	33	0	0	1,618
25 to 64 years	75	3	10	20	20	36	11	0	2,049
65 years and over	2	0	0	0	0	50	50	0	3,595
1956 earnings									
All workers	393	30	22	25	14	9	0	0	955
Male workers	316	27	24	25	15	9	0	0	979
14 to 24 years	44	45	23	18	14	0	0	0	609
25 to 64 years	255	22	25	26	15	12	0	0	1,115
65 years and over	17	53	6	35	6	0	0	0	472
Female workers	77	39	17	25	14	5	0	0	824
14 to 24 years	11	64	9	27	0	0	0	0	391
25 to 64 years	65	34	18	25	17	6	0	0	944
65 years and over	1	100	0	0	0	0	0	0	250

[1] See Table 22, footnote 4 for method of converting 1970 income figures to 1956 dollar values.

Whether money or real income is considered, wages for nonfarm workers remain seriously low. This is especially true for young workers, identified as 14 to 24 years in the table but mainly 20 to 24 years old. The 1970 net income was $1,216 for male and $1,618 for female workers, adjusting to 1956 value of the dollar. This is certainly reason enough for the continued high outmigration of this educated and skilled group.

Take-home pay for area adult workers more than doubled in real terms over the 1955 incomes. The rate of growth was higher for women employees although the actual amount earned is less than for their male counterparts.

Income of Farm Households

Throughout most of this analysis it has been pointed out that socioeconomic characteristics of families with farm residences no longer can be regarded as mutually exclusive from other household types. In like manner, the value of farm sales no longer reliably indicates farm-family income conditions. Only 1 "farmer" in 4 was receiving the majority of his household income from this source. Also, the expense associated with farm operation are poorly timed with returns, especially for the majority of farms involved in livestock production.

Table 25 demonstrates the relation between sales of farm products by farm households and their total household incomes for 1955 and 1969. The simple geometric shift of the figures downward to the right illustrates the importance of off-farm income sources. Although the percentage distributions for 1970 reflect money incomes, the median household incomes listed have been adjusted to reveal real income change. On this basis, while the median value of farm sales increased by only 13 percent over the period of the study, median farm household income increased by 172 percent.

Financial Status of Ozark Area Households

The analysis of family well-being may be fine-tuned somewhat by examining certain aspects of economic behavior. Ozark area residents generally operate on a cash basis. Although ownership of property is regarded highly, borrowing money or mortgaging property is not favorably upheld.

Only 2 in 5 households borrowed any money during the 12 months preceding the survey, including retail credit purchases (Table 26). This represents no change since 1956, despite the

Table 25. Relation of Farm Sales to Total Net Income of Farm Households in 1970 and 1956

Amount of farm sales	Farm households reporting	Households with total incomes of							Median household income 1955-56
		Under $1,000	$1,000 to $2,499	$2,500 to $2,999[1]	$3,000 to $4,999	$5,000 to $7,999	$8,000 to $9,999	$10,000 and over	
	Number	*Percent*							*Dollars*
1970 income									
All households	128	2	10	5	22	43	9	9	4,147[2]
Farm sales of									
Under $250	16	0	19	0	31	50	0	0	3,595
$250 to $999	27	7	19	11	11	44	4	4	3,693
$1,000 to $2,499	41	0	12	8	22	44	12	2	3,988
$2,500 to $2,999	7	0	0	14	29	57	0	0	3,860
$3,000 to $3,999	9	0	0	0	78	22	0	0	3,079
$4,000 to $4,999	6	0	0	0	33	17	33	17	5,752
$5,000 or more	22	0	0	0	0	41	18	41	6,472
1956 income									
All households	330	35	41	24					1,549
Farm sales of						Not applied, 1956			
Under $250	78	38	36	26					1,500
$250 to $999	89	50	37	13					1,000
$1,000 to $2,499	104	34	48	18					1,500
$2,500 or more	59	10	41	49					2,463

[1] In the 1956 study this interval was open-ended at $2,500 or more."

[2] See Table 22, footnote 4 for method of converting 1970 income to 1956 dollar values.

Table 26. Household Financial Status by Family Economic Type, 1970 and 1956

Family economic type	Households reporting	Borrowed money in last 12 months		Savings today compared with year ago				Farm or residence			
				Greater	Less	Same	No savings	Owned		Mortgaged	
	Number	*No.*	*Percent*	*Percent*				*No.*	*Percent*	*No.*	*Percent*
1970 study											
All households	308	129	42	28	15	21	36	271	88	73	24
Farm	58	20	34	31	24	19	26	56	97	12	21
Nonfarm	72	36	50	29	18	14	39	54	75	18	25
Farm-nonfarm	91	47	52	42	15	23	20	88	97	34	37
Semi-employed	0	0	0	0	0	0	0	0	0	0	0
Nonwork	87	26	30	11	6	24	59	73	84	9	10
1956 study											
All households	618	249	40	6	16	45	33	517	84	83	13
Farm	142	60	42	8	18	46	29	130	92	24	17
Nonfarm	185	93	50	9	17	48	26	140	76	27	15
Farm-nonfarm	40	22	55	8	18	43	33	36	90	5	12
Semi-employed	101	42	42	3	17	39	42	86	85	11	11
Nonwork	150	32	21	1	11	47	40	125	83	16	11

greatly improved financial resource base. Borrowing continues to be more common among nonfarm and farm-nonfarm households. While only 1 in 5 nonworkers did any borrowing during the 12 months preceding the field interviews in 1956, nearly 1 in 3 now reports use of credit, but more than half (59 percent) report no savings at the present time.

The improving financial position of area residents is portrayed in the significantly increased number of households reporting greater savings. It is indicated that the farm-nonfarm type is out-distancing both farm and nonfarm households in capital accumulation and in the financial security of the household.

The frequency of mortgages has increased over the years for all but nonwork families, from 16 percent in 1956 to 27 percent in 1970. Again the incidence is much greater for farm-nonfarm households. Ninety-seven percent of the farm and farm-nonfarm households were owner operated in 1970, compared with 92 percent and 90 percent in 1956. The incidence of ownership among nonfarm households remains 75 percent, reflecting a more mobile character.

An intangible aspect of financial status for rural people is the value of food, feed, or, in some cases, fuel produced and consumed at home. Home-use production cannot be measured exactly; yet it is often mentioned as a difference between urban and rural poverty conditions.

Although no estimate of the value of family living supplied by home-produced products was obtained in the 1956 survey, a 1958 study of the eastern Missouri Ozarks placed the value at $271 per household.[45] In the present study, the value of home-use production averaged $432 per household, which converts to $309 in 1956 real income. However, the estimates were applied at the lowest possible wholesale value of products. Home-use production plays an important role in family living, and this point should not be overlooked.

Ozark Farms and Farming Activities

The major changes in farming activities have been indicated earlier (Table 3) as a general shift from cropping and diversified farming activities toward a concentration in dairy, broiler, and cattle production and other specialty enterprises. This continues

[45] Ronald Bird, Frank Miller, and Samuel C. Turner, "Resources and Levels of Income of Farm and Rural Nonfarm Households in the Eastern Ozarks of Missouri," Mo. Agr. Expt. Sta. Bul. 661, 1958.

the trend which began in 1939 with the long failure of the rocky soil to produce anything but subsistence cash grain and row crops. The increase in the number of farm-to-market roads and improved transportation have given the Ozark farmer a clear advantage in a number of local large-consumption areas over producers in nearby states. Improved contact with agricultural agencies and the rapid transfer of ideas dealing with the economic and technological aspects of farming have produced an Ozark farmer no longer satisfied with subsistence farming. The Ozark farmer has become very much a part of the commercial economy since 1956.

Farm Size and Land Use

The number of residences classified as farm decreased from 57 percent of the 1956 sample to 47 percent in the present study. Very little of this difference can be attributed to change in definition employed by census officials. The 1954 Census of Agriculture denoted a farm if three acres or more were present and $150 of produce was present, or if less than three acres when sales of products amounted to $150 or more. For the 1969 Census of Agriculture, farms were denoted if ten acres or more were used to produce and sell $50 in products or if less than ten acres produced for sale $250 in farm products.

Over the 14 years, farms under 100 acres have not changed in size (Table 27). This group is characteristic of the farm-nonfarm economic type. Commercial farms, although fewer in number, have increased in size, which is reflected in the greater percentage of farms in the present study with over 220 acres.

Table 27. Size of Farms and Nonfarm Units, 1970 and 1956

Size of unit	Farms				Nonfarms			
	1970		1956		1970		1956	
Acres	*No.*	*Percent*	*No.*	*Percent*	*No.*	*Percent*	*No.*	*Percent*
All households	146	100	350	100	167	100	279	100
Less than 1	2	1	1		38	23	59	21
1 to 49	17	12	42	12	87	52	128	46
50 to 99	34	23	74	21	20	12	48	17
100 to 219	45	31	124	35	19	11	31	11
220 to 499	37	25	78	22	3	2	13	5
500 and over	11	8	31	9	0	0	0	0

Farm size may simply reflect the acquisition or sale of unusable acreage such as woodland or unimproved pasture. For this reason, it is important to examine changing land uses among those farms reported. Table 28 compares the agricultural characteristics of the 1956 and 1970 farms. The most significant change

Table 28. Use of Land for Specified Purposes, 1970 and 1956

Item	Farms		Acres used		Acres per farm reporting	
	1970	1956	1970	1956	1970	1956
	Number					
All farms	146	350	27,072	61,438	185	176
Farms with crops	97	296	2,942	9,341	30	32
Farms with open pasture	134	317	12,086	26,362	90	83
Farms with woodland pasture	113	263	12,044	25,735	107	98

is the decline in farms with crops, from 85 percent of the 1956 farms to two-thirds in the present sample. Acres per farm reporting crops decreased slightly, but the greater part of this acreage was in hay as opposed to grain crops, as in the 1956 survey.

The increase in acres per farm reporting both open and woodland pasture reveals the increasing importance of livestock production. While open pasture averaged 83 acres in 1956, this increased to 90 acres in 1970.

Economic size of farms also underwent some important changes (Table 29). While part-time and residential farms accounted for 1 in 3 of the 1956 farms, they represent 1 in 2 of the present farms.

In the commercial farm class, 35 percent of the present farms yield $2,500 or more income, compared with 19 percent of the 1956 sample, after changing prices received by farmers are considered. The number of commercial farms reporting less than $1,200 in sales significantly decreased to 3 percent, compared with 20 percent in the earlier period.

Table 29. Type of Farm and Value of Sales, 1970 and 1956

Farm class and value of sales	1970[1]		1956	
	No.	*Percent*	*No.*	*Percent*
Commercial	69	48	212	67
More than $2,500	50	35	60	19
$1,200 to $2,499	15	10	89	28
$250 to $1,199	4	3	63	20
Part-time				
$250 to $1,199	70	49	48	15
Residential				
Under $250	5	3	57	18
All farms	144[2]	100	317[3]	100

[1] Prices received by farmers: 1955=232, 1969=265 on 1910-14 base. (If 1955=100, then 1969=114.2).

[2] Two unclassified.

[3] Thirty-three unclassified.

Table 30. Agricultural Contacts of Farm Families, 1970 and 1956

Item	All farmers, 1970		All farmers, 1956	
	No.	*Percent*	*No.*	*Percent*
All farms	146	100	350	100
Organizational participation				
Farm organization member	40	27	60	17
Attends meetings	30	20	38	11
Usually	6	4	10	3
Occasionally	24	16	28	8
Never attends	10	7	22	6
Cooperatives				
Member	22	15	84	24
Attends meetings	3	2	43	12
Does business with	51	35	83	24
Contacted agricultural agencies				
Extension Service	85	58	147	42
Agricultural Stabilization and and Conservation Service	42	29	96	27
Soil Conservation Service	50	34	114	33
Vocational agriculture teacher	5	3	29	8
Farmers Home Administration	26	18	16	5
Trips to town per month	142	100	339	100
0 to 2	23	16	87	26
3 to 4	37	26	97	28
5 to 6	20	14	33	10
7 or more	62	44	122	36
Distance to town	135	100	349	100
Less than 2.5 miles	10	7	32	9
2.5 to 4.4 miles	21	16	29	8
4.5 to 9.4 miles	36	27	94	27
9.5 to 14.4 miles	19	14	57	17
14.5 or more	49	36	137	39

Agricultural Contacts of Farm Families

The cultural and economic isolation that historically handicapped Ozark farm families has been overcome through improved communication technology and a broader range of institutional contacts.

According to the 1970 sample survey, nearly all forms of participation and formal social contact demonstrated some improvement over the previous representation (Table 30). Membership in farm organizations now claims 1 in 4 farmers, compared with 1 in 6 earlier. Perhaps this trend has some relation to the decreased number of farmers joining cooperatives, although 1 in 3 farmers now report doing business with such organizations, compared with 1 in 4 in 1956.

Contact with federal agricultural agencies provides area farmers with technical information, as well as assistance in farm pond or home construction. More of the informants reported contact with the Agricultural Extension Service, through its resident home and county agents and the publications distributed by their office, than with sister agencies. In 1956, 42 percent of the farm households reported contact with the Extension Service; in 1970, the figure was 58 percent.

Trips to town were more numerous than in 1956, while the distance to the trade center from the outlying farms generally remains approximately the same.

Farm Mechanization and Practices

The diffusion of agricultural technology and adoption of new farm practices by area farm operators has been a slow, but accumulating, process over the years. Since Ozark area farms are widely scattered over the mountainous area, use of other than essential mechanical equipment is prohibitive. However, evidence of improvements in farm practices and mechanization is presented in Table 31. The tractor, which 15 years ago was reported in use on only 38 percent of the farms, now is in service on 81 percent of the farms. The pick-up truck now has a 35 percent higher incidence of utilization, and the automobile 12 percent.

With regard to farm practices, quality improvements for pastureland increased greatly. While only 9 percent of the farmers fertilized their pastures and 2 percent limed their pastures in 1956, these practices were reported by 62 and 49 percent of the farm operators, respectively, in 1970. Use of soil tests, which logically precedes this practice, has increased from 12 to 40 percent.

Most of these improvements reflect the increase in beef cattle production, which represents 97 percent of the farmers today as opposed to 77 percent in 1956.

Table 31. Farm Practices and Equipment, 1970 and 1956

Practices and equipment	Farmers reporting			
	1970		1956	
	No.	*Percent*	*No.*	*Percent*
All farmers	146	100	350	100
Farmers reporting				
Production of crops	97	66	338	97
Fertilized cropland	50	34	168	48
Limed cropland	25	17	11	3
Had soil tested	58	40	43	12
Used hybrid seed	23	16	109	31
Pastureland	142	97	324	93
Fertilized pastures	90	62	32	9
Limed pastures	72	49	6	2
Dairy cattle	75	51	303	87
Used power feed grinder	12	8	20	6
Used milking machines	10	7	24	7
Beef cattle	141	97	270	77
Raised purebred	28	19	43	12
Hay production	86	59	240	69
Used power baler	51	35	120	34
Power equipment used	146	100	350	100
Electricity available	145	99	319	91
Automobile	85	58	162	46
Pick-up truck	127	87	183	52
Other auto or truck	32	22	75	21
Tractor	118	81	132	38

SOCIOECONOMIC STATUS OF THE HOUSEHOLDS LEFT BEHIND

The first two objectives of this study have been met in the statistical profile presented of socioeconomic characteristics of the present sample population and the identification of significant changes in those characteristics of households or individuals during the years under investigation. These results will now be refocused and applied to develop the final objective: determining how families in the sample have adjusted to changing economic opportunities in the community resulting from high levels of out-migration from the area.

Beginning with an evaluation of how families have adjusted over the years of study, this study turns to an explanation of why people have or have not adjusted to changing economic opportunity. The social-psychological factors that have played a significant role in the adjustment process and that serve to determine the nature and extent of future economic progress are discussed.

Socioeconomic Adjustment

The nature and direction of population movement are especially significant for distressed rural areas in which agricultural occupations have long dominated. To achieve industrial growth, the skill composition of the labor force must be changed through the out-migration of people who have skills that complemented the historical economic base and the in-migration of people with experience and skills that are relevant to current manufacturing or commercial enterprises. As pointed out in another study, "If the amount of movement, skills, income, and other characteristics were similar among out- and in-migrants, these migration streams could cancel one another."[46] The nonmigrant members of the rural community's labor market may also experience real upward mobility.

Area In-migrants

One hundred and sixty-five households were designated as in-migrants in the 1970 study. Of these, 28 households (or 17 per-

[46] Bernal L. Green, Lloyd D. Bender, and Rex R. Campbell, "Migration into Four Communities in the Ozark Region," Ark. Agr. Expt. Sta. Bul. 756, 1970, p. 4.

cent) represent families created since 1956, while the remainder reflect geographic relocation of individuals and families.

Of the in-migrant households reporting prior residence, 16 percent came from the adjoining states of Missouri, Kansas, Oklahoma, or Texas, and another 21 percent came from other states. The majority of the in-migrants (63 percent), however, relocated from elsewhere in Arkansas, some from the same or adjacent counties.

Migration is generally associated with changes in family income and occupational-tenure status. In-migrants reported the following changes between their present and prior locations:

Changes	Percent
Same income status	35
Same occupation-tenure status	37
Lower income status	25
Lower occupation-tenure status	25
Higher income status	36
Higher occupation-tenure status	34

Various combinations of changes in socioeconomic status may exist as a result of the occupational and employment characteristics in the 12-county area. Of the in-migrants 23 percent experienced both higher income and higher occupational-tenure status, while 16 percent reported both lower income and lower occupational-tenure status as a result of their relocation.

When specific changes in occupational-tenure status between the present and previous locations of the in-migrants are considered, farming and retirement are revealed to be most important. While 30 percent of the in-migrants reported farming at their prior location, 45 percent were farming at the 1970 location. While 2 percent of the in-migrants were retired at their prior location, 24 percent are now retired.

The greatest improvement in occupational-tenure status occurred among those in-migrants reporting farming operations. At their prior location, 25 percent were full owners of their farming operations. Today, 42 percent of the in-migrants are full owners of their farms. With regard to other occupational categories, the number of in-migrant family heads reporting white collar employment previously (31 percent) was reduced in half, as was the number (35 percent) reporting blue collar occupation at their prior locations.

Occupational Adjustment

The 148 nonmigrant households (47 percent of the sample population) were sampled in the 1956 survey. They are the low-income families revealed in the initial survey (71 percent with family income less than $2,000 in 1956). Thus the progress of these initial informants is of special interest. They may be referred to loosely as the "hard-core" low-income families left behind in this high out-migration area. If industrialization and commercial development plans and proposals are to reduce poverty successfully, they must reach the poor among the nonmigrant members of a depressed area's labor force. Otherwise, public subsidies to promote out-migration of surplus labor and to attract industry may lead to regional progress, but will not be direct cures for inequality and poverty among area residents.

Table 32 portrays the employment among area residents considered eligible for work by their type of residential heritage. Approximately 1 in 3 of the in-migrant persons report some nonfarm work experience during 1969, compared with only 1 in 5 nonmigrant members of the labor force. Farming, the traditional and declining economic base, includes one-fourth more nonmigrant than in-migrant members of the labor force. The numbers of retired and disabled individuals are approximately the same in both groups. The fact that many in-migrants brought with them independent sources of income (such as investments and pensions) while out-migration from the area removed some of the surplus

Table 32. Kind of Work Reported by Persons 14 Years Old and Over During the Preceding Year, by Migration Type, 1970

Kind of work or major activity	Migration type			
	In-migrant		Nonmigrant	
	Number	*Percent*	*Number*	*Percent*
All individuals	409	100	341	100
Farms				
Farm operators	44	11	61	18
Unpaid farm worker	1	*	0	0
Farm wage work	1	*	0	0
Nonfarm work				
Own business or profession	8	2	2	1
Other nonfarm	126	31	76	22
Other activities				
Armed forces	3	1	1	*
School	60	14	34	10
Keeping house	89	22	93	27
Retired	42	10	45	13
Disabled	27	7	19	6
Unemployed	8	2	10	3

* Less than .005.

Table 33. Major Industry in Which Persons 14 Years Old and Over Were Employed, by Migration Type, 1970

Major industry	Migration type			
	In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*
All persons	409	100	341	100
Not actively employed	225	55	203	60
Agriculture	40	10	58	17
Construction	18	5	10	3
Manufacturing	26	6	16	5
Timber, lumber and wood products	19	5	8	2
Transportation	3	1	3	1
Public utilities	9	2	3	1
Government	10	2	7	2
Service workers	5	1	9	2
Wholesale and retail trade	49	12	21	6
All others	5	1	3	1

young and untrained members of the labor force is a favorable adjustment for the economic growth of the area.

Unemployment is slightly higher for nonmigrants than for in-migrants (Table 33), suggesting that in-migrants may be slightly more employable than nonmigrants.

While agriculture employs more working members of the nonmigrant group, the timber or wood products industry and the wholesale and retail trade industry have twice as many in-migrant as nonmigrant employees. Nearly half of all working in-migrants were engaged in commercial activities.

Table 34 presents several agriculturally-related traits of in- and nonmigrant households. Farm households account for 35 percent of in-migrant and 60 percent of nonmigrant households. Of the in-migrant farm households, however, approximately 60 percent are part-time and residential farms—the farm-nonfarm household economic type shown earlier to lead in family income. Nonmigrant farm households are about equally divided between commercial farms and part-time and residential farms. Their commercial farms are somewhat more productive than those of the in-migrants, indicating one reason why nonmigrants remain behind in the area and in agriculture.

In-migrant farm households average 5.4 and 10.8 on the farm practices and farm mechanization indexes, respectively, compared with 4.9 and 9.8 for nonmigrant farm families. To the extent that this situation continues to prevail, the economic plight of nonmigrant farm households may be expected to linger or become more severe.

Table 34. Farm Type, Practices, and Mechanization, by Migration Type, 1970

Farm type, value of sales, practices, and mechanization	Migration type			
	In-migrant		Nonmigrant	
	Number	*Percent*	*Number*	*Percent*
All households	165	100	148	100
All farms	57	35	89	60
Commercial farms	23	41	48	53
$4,500 or more	11	19	25	28
$3,000 to $4,499	3	5	9	10
$1,200 to $2,999	7	13	10	11
$250 to $1,199	1	2	3	3
Part-time farms				
$250 to $1,199	31	54	39	45
Residential farms				
Under $250	3	5	2	2
Farm practices score				
Less than 2.0	6	10	10	11
2.0 to 3.9	8	14	18	20
4.0 to 5.9	21	37	34	38
6.0 to 7.9	12	21	11	13
8.0 to 10	10	18	16	18
Farm mechanization score				
Less than 3.0	3	5	9	10
3.0 to 6.9	12	21	21	24
7.0 to 10.9	15	27	20	23
11.0 to 14.9	15	26	23	26
15.0 and over	12	21	16	18

Occupational changes in the 12-county Arkansas Ozark area over the past 20 years are presented in Table 35. Major occupational groups were weighted by a number which, when multiplied by 1,000, represents the 1960 median earnings for each major occupational group in rural Arkansas.[47] Total index values for each major occupational group in the 1950 and 1970 labor forces reveal approximately 20 percent upward labor mobility over the 20 years. Larger components of this change are the doubling of the manager-official-proprietor group and the significant increase in numbers of craftsmen and operative workers, while farm owners or managers decreased. Although the relation between the high out-migration rates experienced and occupational mobility would be a logical correlative of this analysis, it is beyond the scope of the present investigation. However, when the occupation structure and the net mid-period family income are applied to a breakdown of the residual population, the markedly lower status of nonmigrants is revealed.

[47] U. S. Department of Commerce, Bureau of the Census, "U. S. Census of Population, 1960, Arkansas, Detailed Characteristics," U. S. Govt. Printing Office, Table 124, pp. 348 & 349, 1962.

Table 35. Occupational Status and Mobility of Employed Members of the Labor Force, 1970 and 1950

Occupation group and weights[1]		Occupation status, 1970[2]						Status, 1950[3]	
		All		In-migrant		Nonmigrant		all	
		%	*Score*	%	*Score*	%	*Score*	%	*Score*
Professional, technical	(4.8)	6	28.8	5	24.0	5	24.0	5	24.0
Manager, official, proprietor	(5.0)	14	70.0	18	90.0	9	45.0	7	35.0
Sales and clerical	(3.8)	3	11.4	3	11.4	5	19.0	7	26.6
Craftsman or foreman	(3.5)	15	52.5	16	56.0	12	42.0	9	31.5
Operative worker	(2.6)	24	62.4	28	72.8	16	41.6	9	23.5
Service or laborer	(1.9)	11	20.9	10	19.0	12	22.8	11	20.9
Farm owner or manager	(1.6)	26	41.6	18	28.8	41	65.6	48	76.8
Farm laborer	(0.8)	2	1.6	2	1.6	0	0	4	3.2
Total index score			289.2		303.6		260.0		241.4
Absolute change from 1950 base			47.8		62.2		18.6		
Percent increase from 1950 base			19.8		25.8		7.7		

[1] The weights (given in parentheses) are the median earnings (per $1,000) for 1959 in major occupation groups for rural Arkansas, derived from the U. S. Census of Population, 1960, Arkansas, General Social and Economic Characteristics.

[2] Data for the 313 sample households of the 12-county area.

[3] Data apply to the total rural population of the 12 counties, from U. S. Census of Population, 1950, Arkansas, General Characteristics.

Nonmigrant members of the 1970 labor force experienced an 8 percent change in upward occupational mobility since 1950 while their in-migrant counterparts showed a 26 percent gain in occupational mobility over the 1950 area labor force. Apparently benefits of occupational readjustment, brought about by years of selective net out-migration and industrial growth, do not accrue to the long-time low-income residents of the area. The in-migrant members of the labor force, who by their move into the area demonstrate greater job mobility, appear to have advantage over nonmigrants in competing for new and vacant jobs. Thus, the competition of in-migrants may tend to restrict the opportunity for advancement of the poor among the nonmigrants.

Income and Employment

Although vertical job mobility through occupational restructuring does not appear to benefit the nonmigrant members of the area, upward mobility through increased wages and reduced underemployment may relieve their distress. Also, as pointed out earlier, many of the area's household heads engage in multiple employment, which has served to improve household incomes.

Table 36 reports family income and economic types of in-migrant and nonmigrant households. For nonmigrants the pattern appears to be one of holding onto traditional agricultural employments while exploiting various nonfarm and nonwork income

Table 36. Family Income and Economic Types, by Migration Type, 1970

Family income and economic types	Migration type			
	In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*
All households	165	100	148[1]	100
Family income types				
Agriculture only	9	6	7	5
Nonfarm work only	39	24	8	5
Nonwork only	40	24	37	25
Agriculture plus nonfarm work				
Mainly agriculture	4	2	6	4
Mainly nonfarm	20	12	17	12
Nonfarm plus nonwork				
Mainly nonfarm work	17	10	11	7
Mainly nonwork	8	5	4	3
Agriculture plus nonwork				
Mainly agriculture	5	3	19	13
Mainly nonwork	9	6	14	9
Agriculture plus nonfarm plus nonwork				
Mainly agriculture	0	0	3	2
Mainly nonfarm	12	7	19	14
Mainly nonwork	2	1	2	1
Family economic types				
Farm	22	13	38	26
Nonfarm	54	33	18	12
Farm-nonfarm	42	26	50	34
Nonwork	47	28	42	28

[1] Of family income types one case excluded as no income or not reported.

sources. This would account for the high proportion of farm and farm-nonfarm economic types among the nonmigrants, although their median household incomes (Table 37) do not reflect the high remuneration found to be associated with these types.

One explanation of the higher median incomes for in-migrant households is apparent in Table 38. In-migrant households with

Table 37. Household Incomes in 1970, by Migration Type

Household income, 1970	All households		Migration type			
			In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*	*No.*	*Percent*
Households reporting	313	100	165	100	148	100
Less than $500	4	1	2	1	2	1
$ 500 to $999	8	3	5	3	3	2
$1,000 to $1,999	43	14	17	10	26	18
$2,000 to $2,999	47	15	18	11	29	20
$3,000 to $4,999	70	22	40	25	30	20
$5,000 to $6,999	65	21	37	22	28	19
$7,000 to $9,999	50	16	26	16	24	16
$10,000 or more	26	8	20	12	6	4
Median household income	$4,557		$5,030		$3,930	

Table 38. Number of Households with Members Employed Off the Farm, by Migration Type, 1970

Households reporting members working at nonfarm jobs	Migration type			
	In-migrant		Nonmigrant	
	%	*Percent*	*No.*	*Percent*
Households with working members	139	100	119	100
Nonfarm workers in household				
None	39	28	52	44
One	56	40	47	39
Two	39	28	17	14
Three	3	2	2	2
Four or more	2	1	1	1

two or more members employed off the farm represent 31 percent of working households, compared with 17 percent for the nonmigrant households. Even more significant is the fact that nonmigrant households with no nonfarm workers represent 44 percent of working nonmigrant families. Since family income from farming averaged only $3,800 (Table 22), this would help explain the comparatively low nonmigrant household incomes.

The $1,100 differential between the median household incomes of in-migrant and nonmigrant families does not necessarily

Table 39. Relative Income Deprivation in 1969, by Migration Type, Based on the Relationship of Family Income to Household Size[1]

Household income	Degree of deprivation				
	Serious	Definite	Marginal	Probably not	Definitely not
	Number of households				
In-migrant households					
Under $1,000	4	3	...[2]	....	....
$1,000 to $1,999	0	13	4	....	....
$2,000 to $2,999	1	2	14	1	....
$3,000 to $4,999	...	0	18	21	1
$5,000 to $7,999	....	....	3	32	18
$8,000 to $9,999	....	....	....	0	10
$10,000 and over	....	....	....	0	20
All households (165)					
Number	5	18	39	54	49
Percent	3	11	24	33	30
Nonmigrant households					
Under $1,000	3	2	....	....	....
$1,000 to $1,999	0	15	11	....	....
$2,000 to $2,999	0	2	25	2	....
$3,000 to $4,999	....	2	4	20	4
$5,000 to $7,999	....	....	0	10	31
$8,000 to $9,999	....	....	....	0	11
$10,000 and over	....	....	....	0	6
All households (148)					
Number	3	21	40	32	52
Percent	2	14	27	22	35

[1] For full explanation of the number of persons per income class see John L. McCoy, "Rural Poverty in Three Southern Regions," Agr. Econ. Report 176, U. S. Dept. of Agr., Econ. Res. Serv., p. 20, 1970.

[2] Dashes indicate inapplicable cells.

reflect greater deprivation on the part of nonmigrant households. Nonmigrant households are generally smaller and the income required for subsistence would be less. Applying the criteria for establishing relative income deprivation based on family size (Table 39) presents the degree of deprivation for in-migrant and nonmigrant households, respectively.

Households experiencing poverty conditions when income is related to family size account for 38 percent of the in-migrant families and 43 percent of the nonmigrant. Fourteen percent of the in-migrant families and 16 percent of the nonmigrant families are seriously or definitely deprived. The in-migration of relatively low-income families into a low-income depressed area represents what Bender and Green refer to as the ghettoization of poverty in an area or region.[48] Further support for this argument is the fact that approximately 11 percent of the in-migrant households reported receiving some degree of State welfare payments, compared with 22 percent of the nonmigrant families (Table 40).

Table 40. Sources of 1970 Family Income, by Migration Type

Sources of family income	Migration type			
	In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*
All households	165	100	148	100
Work only	72	44	36	24
Investments only	2	1	0	0
Pension only	19	12	11	7
Welfare only	8	5	3	2
Work and investments	19	12	21	14
Work and pensions	13	8	23	16
Work and welfare	5	3	3	2
Work-investment-welfare	1	....	0	0
Work-investment-pension	8	5	19	13
Work-pension-welfare	2	1	4	3
Work-investment-pension-welfare	1	....	5	3
Investments and pensions	11	7	6	4
Investments and welfare	0	0	1	1
Investments-pension-welfare	1	....	1	1
Pensions and welfare	3	2	15	10

In general, in-migrant households show a greater degree of income stability and much less diversity in sources of income than nonmigrants. Typically, nonmigrant families are receiving social security and some income from farm sales and/or land rental. Of in-migrant families 44 percent reported income from work only and another 12 percent from pensions only.

For both in-migrants and nonmigrants, the average number

[48] Lloyd D. Bender and Bernal L. Green, "Industrialization as a Poverty Policy: Revisited," Mimeographed staff paper, Dept. of Agr. Econ., Univ. of Ark., 1970, p. 19.

Table 41. Employment of Persons 14 Years Old and Over, for a Stated Number of Days in 1970, by Household Status and Migration Type

Household status and type	All persons[1]	Worked during year	Worked during year					Average days of employment
			Total persons[1]	Days of reported work: 1 to 49	50 to 99	100 to 199	200 or more	
	Number	*Percent*	*Number*	*Percent*				*Number*
In-migrants	409	100	215	2	10	21	67	249
Male	213	52	133	0	8	20	72	251
Heads	156	73	117	0	4	20	76	273
Sons	54	25	16	0	38	19	43	166
Female	196	48	82	5	13	23	59	225
Heads	9	5	2	0	0	0	100	241
Wives	150	76	77	5	12	25	58	223
Daughters	33	17	3	0	67	0	33	75
Nonmigrants	341	100	197	5	10	25	60	233
Male	173	51	112	6	8	20	66	240
Heads	133	77	90	6	6	17	71	248
Sons	38	22	21	10	14	33	43	170
Female	168	49	85	4	12	32	52	106
Heads	15	9	4	0	0	25	75	241
Wives	120	72	72	4	8	33	55	214
Daughters	24	14	7	0	42	29	29	127

[1] Included in the totals are 5 male and 13 female persons, and 1 male and 2 female workers, of other than sib-parent relationship.

of days of employment remains well below the 260-day standard applied by the U. S. Department of Labor, workers from in-migrant households averaging 249 days of work, compared with 233 days for nonmigrant workers (Table 41). In terms of household well-being, the differential between male family heads for the two groups is more revealing. While in-migrant male heads averaged 273 days, nonmigrant family heads worked only 248 days during 1969. Female in-migrant workers averaged approximately one month more work than female nonmigrants, although no difference exists for female family heads.

While underemployment is being solved for both groups of residents, greater underemployment appears to be more usual among nonmigrant households and particularly for female members of the labor force. The continued underemployment of nonmigrant workers necessarily means that a higher proportion of them will experience income inequality and poverty.

Socioeconomic Status

A family's material possessions and housing conditions, as well as its social participation, represent the cumulative result of years of economic adjustment and sustained effort. These dimensions of socioeconomic status provide a more stable indication of a family's adjustments in level of living than do income or occupational employment for a single year.

Rural housing conditions and household and cultural possessions were examined and a preliminary index score was assigned to each family on the basis of the potential to actual presence of a desirable condition or possession. However, in order to evaluate the adjusted state or achieved levels of adjustment of rural open-country families, it is necessary to determine the extent to which they have achieved their goals relative to the generalized expectations and norms of the social system in which they interact. To deal with this more intensive focus of analysis, each family's preliminary score was divided by the average score for the 313 families, and the results were multiplied by 100. A score of less than 100 percent represents a below-average condition, and above 100 a better-than-average situation for the area families.

The revised housing index in Table 42 indicates social adjustment trends for in-migrant and nonmigrant households. Looking first at the housing adjustments for all area households, one notes some progress. When the 1970 informants reported in 10-year retrospect for 1960, the data revealed that only 46 percent of the households had achieved or surpassed the realized norm

Table 42. General Housing Index Score for 1970 and 1960 Households, By Migration Type[1]

General housing index score	All households		Migration type			
			In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*	*No.*	*Percent*
1970 study						
All	313	100	165	100	148	100
Less than 40	20	7	11	7	9	6
40 to 59	45	15	22	13	25	17
60 to 79	25	8	13	8	12	8
80 to 99	38	12	14	8	24	16
100 to 119	59	19	27	16	32	22
120 to 139	72	24	39	24	36	24
140 or more	48	15	38	23	10	7
1960 data						
All	227	100	87	100	140	100
Less than 40	11	5	2	2	9	6
40 to 59	53	21	16	18	37	26
60 to 79	31	14	9	10	22	16
80 to 99	32	14	5	6	17	12
100 to 119	25	11	6	6	19	14
120 to 139	29	12	14	16	15	11
140 or more	56	23	35	42	21	15

[1]See footnote, Table 13.

(100) for housing; today, 58 percent of the households have reached this generalized goal. This represents a 25 percent increase in the index value for all households.

Sixty-three percent of the in-migrant households today score 100 or greater, compared with 53 percent of nonmigrants. In-migrant households show no increase over the ten-year period,

Table 43. General Possessions Index Score for 1970 and 1960 Households, By Migration Type[1]

General possessions index score	All households		Migration type			
			In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*	*No.*	*Percent*
1970 study						
All	313	100	165	100	148	100
Less than 40	11	4	7	4	4	3
40 to 59	24	8	13	8	11	7
60 to 79	51	16	22	13	29	20
80 to 99	64	20	33	20	31	21
100 to 119	61	20	26	16	35	23
120 to 139	64	20	38	23	26	18
140 or more	38	12	26	16	12	8
1960 data						
All	282	100	137	100	145	100
Less than 40	20	7	13	9	7	5
40 to 59	28	10	15	11	13	9
60 to 79	59	22	24	18	35	25
80 to 99	34	12	15	11	19	13
100 to 119	49	17	21	15	28	19
120 to 139	35	12	10	7	25	17
140 or more	57	20	39	29	18	12

[1] See footnote, Table 13.

while nonmigrant households scored an increase from 40 to 53 percent of the families at or above the housing norm.

Socioeconomic adjustment in terms of household and cultural possessions does not show the same diversity as housing (Table 43). The pattern is one of greater plurality of material possessions among all households, with fewer families at either extreme. However, 39 percent of in-migrant households have an index score of 120 or more compared with 26 percent of nonmigrant households.

The rural open-country households were asked a series of questions concerning their social activities and participation or membership in various rural-based organizations. From their answers, an index of social participation was developed and converted to a general index as described under housing index. Social activities and associations are important sources of contact through which information regarding labor market demands and agricultural trade reaches Ozark families, although their isolation is no longer the barrier to economic development that it was in previous times.

Table 44. General Social Participation Index Score, by Migration Type, 1970

General social participation index score	All households		Migration type			
			In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*	*No.*	*Percent*
All households	313	100	165	100	148	100
Less than 40	23	7	15	9	8	5
40 to 59	35	11	21	13	14	9
60 to 79	33	11	20	12	13	9
80 to 99	50	16	29	18	21	14
100 to 119	60	19	25	15	35	24
120 to 139	57	18	31	19	26	18
140 or more	43	14	20	12	23	16
Not reported	12	4	4	2	8	5

Social participation among in-migrants is somewhat below the norm for area families (Table 44). This may indicate a greater financial independence and a lack of complete acceptance by nonmigrant community membership organizations. For both in-migrant and nonmigrant households, the percentages are widely distributed over the scale, indicating no strong social participation patterns.

The three generalized level-of-living scales presented can be combined for each family to arrive at a value that represents their

Table 45. Socio-Economic Status Score of Households, by Migration Type, 1970

Socio-economic status index score	All households		Migration type			
			In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*	*No.*	*Percent*
All households	313	100	165	100	148	100
Less than 40	7	2	3	2	4	3
40 to 59	27	9	15	9	12	8
60 to 79	36	12	18	11	18	12
80 to 99	70	22	33	20	37	25
100 to 119	81	26	43	26	38	26
120 to 139	69	22	38	23	31	21
140 or more	22	7	14	8	8	5

socioeconomic status. The data for 1960 are too inconclusive for meaningful presentation alongside the 1970 scale scores, but they do suggest that the nonmigrant households made the most progress, although they are still slightly behind the in-migrants in overall status today (Table 45). Fifty-seven percent of the in-migrant households have achieved or exceeded the realized norm for the open-country households, compared with 52 percent of the nonmigrant families. However, problems of income inequality and poverty are revealed by the large percentages of both household types at the lower extremities of the scale. Since a score of 100 represents the average level of well-being for households in the Arkansas Ozark area, the fact that 1 in 5 households has achieved less than 80 percent of this standard indicates a need for serious concern. The equal number of in-migrants to the area who are members of this group further aggravate an already-depressed condition.

Employability Attributes

Much of the occupational restructuring and socioeconomic change that has taken place among residual residents of the area can be explained or associated with various employability attributes of in-migrants and nonmigrants. Even though the economic base of the area is diversely spread among farming, timber-sawmilling, construction, commerce, and manufacturing, such characteristics as advancing age, low levels of formal education, and physical handicaps serve to discriminate heavily against a large percentage of the population—notably, the nonmigrant members.

Table 46. Age of Household Heads, by Migration Type, 1970

Age of household head	Migration type			
	In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*
All households	165	100	148	100
Less than 25 years	7	4	0	0
25 to 39 years	47	29	4	3
40 to 49 years	39	24	20	13
50 to 59 years	28	16	41	27
60 to 64 years	20	12	19	13
65 to 74 years	21	13	42	29
75 years and over	3	2	22	15
Median age of household heads	48.1 years		62.4 years	

Age and Education

The data in Table 46 show a significant age differential in favor of in-migrants, i.e., a median age of 48 years compared with 62 years for the nonmigrants. Given present institutional practices which place older job applicants at a disadvantage, it becomes apparent why 40 percent of the nonmigrant household heads report farm ownership and management as their major occupation. Within the more desirable age group of 25 to 59, approximately 3 in 4 in-migrant household heads would be available for employment, compared with only 2 in 5 nonmigrant heads. Present and future public efforts to encourage industrial location and job formation in rural areas as a poverty program[49] would not appear helpful in improving the economic situation of the chronically low-incomed. In fact, such policy decisions, unless carefully considered, may stimulate greater income disequilibrium. From the standpoint of age, it seems impossible to help many rural Ozark area families except through programs associated with income transfers, such as social security, welfare, and retirement programs.

The problem of advancing age is intensified by the low levels of formal education for area household heads (Table 47). An extreme gap in educational achievement is revealed between in-migrant and nonmigrant household heads. Nine percent of in-migrant and 23 percent of nonmigrant breadwinners can be considered functional illiterates with less than a fifth grade education. A high school education normally is considered desirable for industrial development and human resource development po-

[49] See for example: Chamber of Commerce of the United States, "Rural Poverty and Regional Progress in an Urban Society," Chamber of Commerce of the United States, 4th Report, pp. 37 to 39, 1969.

Table 47. School Grades Completed by Household Heads, by Migration Type, 1970

School grades completed by household heads	Migration type			
	In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*
All households	165	100	148	100
No formal education	0	0	4	3
First to third grade	5	3	14	9
Fourth grade	10	6	16	11
Fifth to sixth	16	10	17	11
Seventh grade	10	6	15	10
Eighth grade	35	21	52	35
One to three years high school	27	16	17	11
Four years high school	43	26	8	6
One to three years college	13	8	4	3
Four years college	6	4	1	1
Median school grades completed	9.7		8.2	

tential. Yet, only 10 percent of the nonmigrant household heads and 38 percent of the in-migrant heads had accomplished this level of educational achievement. Nonmigrant residents of the area are seriously prevented from upward mobility, which implies an increase in wages associated with a job move, as a result of their relatively low level of formal education.

Collectively, in terms of age and level of formal education, both groups of area residents fail to offer the minimal to motivate industrial planners to locate industry in the area, although it appears that in-migrants have an advantage over nonmigrants in competing for nonfarm employment opportunities.

Training and Skills

In a highly dynamic market economy, mobility of labor is essential for efficient use of resources. Labor mobility and the nature of labor-force adjustments for an area depend to some extent on the kind and nature of marketable skills possessed by labor-force participants.

Table 48 reports the quality of skilled manpower among area residents. In-migrant household heads are more highly trained with 35 percent reporting occupational skills, compared with 15 percent of nonmigrant heads. From the point of view of industrial development, 20 percent of in-migrant household heads, compared with 4 percent of nonmigrant heads, have received some training in mechanical, technical, or industrial skills, but for the entire labor force, 10 and 2 percent, respectively, have industrial train-

Table 48. Nonfarm Training of Household Heads and of All People 14 Years Old and Over, by Migration Type, 1970

Kind of nonfarm training or skills reported	Migration type			
	In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*
Household heads				
All households	165	100	148	100
Mechanical, technical, and industrial skills	33	20	6	4
Commercial training	7	4	3	2
Construction skills	10	6	9	6
Teacher training	8	4	3	2
Service skills	2	1	1	1
No training or skills	105	65	126	85
All persons				
All persons (14 years old and over)	409	100	341	100
Mechanical, technical, and industrial skills	39	10	7	2
Commercial training	23	6	5	1
Construction skills	11	2	12	4
Teacher training	26	6	13	4
Service skills	4	1	7	2
No training or skills	306	75	297	87

ing. Twenty-five percent of all members of in-migrant households 14 years and over report training and skills, compared with 13 percent of the nonmigrant households.

Thus in-migrants are in a better position to exploit their advantage over nonmigrants for vacant and newly-formulated employment opportunities, given equal labor force information. If the older and unskilled persons who characterize the nonmigrant labor force are to benefit from subsidization plans for industrial location in rural areas, attention must be given to attracting industry with less demanding labor-force requirements and hiring policies favorable to area residents.

Physical Condition

A final aspect of employability is physical health and handicaps. Area residents were asked to rate their ability for employment and their physical condition. Reported conditions for household heads and their ability to work are given in Table 49.

The head of the household was defined as the person who usually earns most of the money supporting the family and who makes most of the important family decisions. The greater economic plight of nonmigrants is evidenced by the fact that only 44 percent of household heads considered themselves fully able to work, compared with 62 percent of in-migrant family heads. In-migrant household heads had a slight advantage in respect to disability, with 14 percent reporting being disabled relative to 16 percent for nonmigrant family heads. The percentages on retire-

Table 49. Head's Ability To Work and Physical Condition, by Migration Type, 1970

Ability to work and physical condition	Migration type			
	In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*
All households	165	100	148	100
Head's ability to work				
Fully able	103	62	65	44
Partial-permanent disability	16	10	19	13
Total disability	7	4	5	3
Retired-no disability	21	13	28	19
Retired-partial disability	18	11	31	21
Head's physical condition				
Excellent health	45	27	12	8
Good health	42	26	40	27
Average health	31	19	43	29
Poor health	43	26	48	33
Undetermined	4	2	5	3

ment are somewhat deceiving since for many area residents retirement means farming or raising livestock on a less-than-full-scale basis. Also, farming does not institutionally discriminate on the basis of age and, for many low-income and aging families, it represents the only way to make a living.

Good health is needed for the full utilization of human resources. A high level of economic activity could be sustained by only 35 percent of nonmigrant household heads and 53 percent of the in-migrant family heads on the basis of their reported physical condition. Poor health was reported by more heads of nonmigrant than in-migrant households. Thus, in health as well as other major employability aspects, nonmigrants lag behind in-migrants and it becomes easier to understand and explain their apparent lack of socioeconomic progress, relative to in-migrant residents, over the period of investigation.

Potential for Progress

Each question asked in this study was posed as a central part of the larger problem of determining the prospects for improving socioeconomic conditions among households in low-income rural areas. The data reported thus far have offered several sets of factors or conditions relevant to such a concern. However, implicit in most studies or programs dealing with low-income areas is the assumption that people are generally willing to make the necessary sacrifices to improve their economic well-being, given equal opportunity. To provide data concerning this assumption, the

attitudes of household heads and homemakers were sampled; first, they were sampled by considering aspirational levels—job and income—and then by determining the sociopsychological state of mind of the individual—anomia.

Job Mobility and Financial Aspirations

The measures of occupational aspiration used for this study were designed to indicate the relative intensity of social and economic desire among rural adults in the South.[50] Job and income goals are focused on a hypothetical situation involving a respondent's willingness to take a new job at higher wages in light of specific undesirable conditions related to the employment. For both heads and homemakers, a different type of six-item "Guttman Scale"[51] was employed which combines multiple items into a composite measure so that an affirmative response to a higher value on the scale predicts an affirmative response to all lower conditions.

Information was not obtained when the household had no male head or if the male head was 65 years of age and older or totally disabled. Of the 313 households in the sample, information was recorded for 151 homemakers and 130 male family heads. Comparable information from heads and homemakers in the same household, for use in the job mobility analysis, was obtained in 112 households.

The degree of willingness of in-migrant and nonmigrant household heads to accept a new job at higher pay under stated conditions is indicated in Table 50. Both in-migrant and nonmigrant households rank fairly high in financial aspirations, with median scores of 4.1 and 4.2, respectively. For each migration type, approximately 1 in 4 household heads would not accept a new job at twice his present wage "under any circumstances"; this would seem to imply that the assumption of "economic man" may not be altogether valid for rural family heads.

The failure of nonmigrant household heads to achieve the higher levels of income and occupation realized by in-migrants apparently does not result from lack of incentive. Twenty-one percent of the nonmigrant family heads indicated high aspiration levels, compared with 17 percent of the in-migrant household heads.

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[50] John E. Dunkelberger, "Measures of Job Mobility or Financial Aspiration," Scaling Social Data, So. Coop. Ser. Bul. 108, pp. 30 to 45, 1965.

[51] Louis Guttman, "A New Approach to Factor Analysis: The Radex," ed. Paul F. Lazarsfeld, Mathematical Thinking in the Social Sciences, The Free Press, Glencoe, p. 259, 1954.

Table 50. Financial Aspiration Scale Score for Household Heads, by Migration Type, 1970

Score value	Hypothetical working conditions required for new job and level of aspiration	Migration type			
		In-migrant		Nonmigrant	
		No.	*Percent*	*No.*	*Percent*
Seriously low aspiration level					
0	Would not take new job under any circumstances	17	21	11	24
Low aspiration level					
1	You would have to work nights	6	7	3	6
2	Your family would have to leave community	6	7	1	2
Medium aspiration level					
3	You would have to give up your spare time	6	7	5	11
4	You would have to work harder	34	41	17	36
High aspiration level					
5	You would have to be away from your family for some time	5	6	7	15
6	Your family would have to move around a lot	9	11	3	6
	Median scale score	4.1		4.2	

When housewives were asked under what conditions they would be willing to accept a doubling of incomes for their husbands, a slightly different situation was portrayed (Table 51). While 1 in 5 in-migrant homemakers had a seriously low level of financial aspiration, nearly 2 in 5 nonmigrant housewives reported

Table 51. Financial Aspiration Scale Score for Homemakers, by Migration Type, 1970

Scale score	Hypothetical working conditions required for husband's new job, and level of homemaker's aspiration	Migration type			
		In-migrant		Nonmigrant	
		No.	*Percent*	*No.*	*Percent*
Seriously low aspiration level					
0	Would not want husband to change jobs	19	20	22	38
Low aspiration level					
1	Your husband would have to work nights	4	4	2	4
2	You would have to leave your friends in this community	16	17	3	6
Medium aspiration level					
3	Your husband would have to give up his spare time	6	6	5	9
4	Your husband would have to be away from the family for some time	8	8	3	6
High aspiration level					
5	You would have to keep quiet about your religious views	17	18	8	14
6	Your husband would have to work harder	25	27	13	23
	Median scale score	4.3		3.4	

they would not want their husbands changing jobs under any conditions. Nonmigrant homemakers scored well below their male household heads with a median aspiration score at 3.4, whereas in-migrant homemakers scored slightly ahead, at a 4.3 median scale value.

A significant difference exists in the proportions of housewives and male household heads who exhibit high aspiration levels. Forty-five percent of the in-migrant homemakers had high aspirations, compared with 37 percent of the nonmigrants, reversing the slight difference in favor of nonmigrant heads. However, all area homemakers reveal an unwillingness to impose extra work burdens on their husbands in order to upgrade family incomes.

To assess the job mobility aspirations of in-migrant and nonmigrant households, responses of both household heads and homemakers from a single household were combined. The scale[52] involved assigning a score in terms of the dichotomized favorable and unfavorable responses of the couples to the statements which appear in Tables 50 and 51. A score of five points was assigned on the basis of a favorable response by both partners, two points was assigned for a favorable response by either the head or the homemaker, and no points were given for a negative response by both husband and wife. The scores were totaled and divided by three to yield a ten-point scale.

The combined measure of occupational and/or income aspirations of household heads and homemakers from the same household are presented in Table 52 by migration type. Nonmigrant

Table 52. Family Job Mobility Aspirations, by Migration Type

Scale score and aspiration level	Migration type			
	In-migrant		Nonmigrant	
	No.	*Percent*	*No.*	*Percent*
Low aspiration level				
1.0 to 2.9	17	23	8	19
3.0 to 3.9	5	7	5	12
Medium aspiration level				
4.0 to 4.9	15	21	4	10
5.0 to 6.9	15	21	10	25
7.0 to 7.9	4	6	3	7
High aspiration level				
8.0 to 9.9	4	6	2	5
10.0	11	15	9	22
Median aspiration level	4.8		6.0	

[52] Dunkelberger, op. cit., p. 35.

households exhibited a significantly higher median level of aspirations at 6.0, relative to a median score of 4.8 for in-migrant households. Apparently nonmigrant households are highly motivated and interested in seeking new employment opportunities. Their failure to realize any degree of real upward job mobility over the period of study implies that they had been discriminated against by institutional practices regarding age, education, and physical condition or disability, rather than lack of concern for the economic conditions in which they find themselves.

Anomia

Another measure of attitude used by social scientists to better understand the nature of socioeconomic adjustments is termed anomia. According to Professor Alleger: "The anomia of individuals in the low-income rural areas of the southern regions seems to center around one to three personally identified situations: (1) a person thinks his community leaders are indifferent to his needs, (2) he comes to believe that his goal-objectives are eluding his grasp, or (3) he views his immediate personal relationships as no longer being predictive or supportive; or all three may occur together."[53]

This feeling of hopelessness and discouragement is normally measured by the Strole Scale[54] which presents a series of postulates worded in such a manner that they can be answered either "agree," "disagree," or "no opinion." This report employs the modified version of the scale developed in the Southern Regional Project S-44 by Seung Moon and Glenn McCann.[55] This modified version lends itself to a Guttman-type scoring index, in which a high score is associated with a high level of anxiety and despair.

Table 53 shows the attitude scale scores of area household heads by their migration type. Eighty percent of in-migrant household heads and 85 percent of nonmigrants are affected by a psychological state of mind bordering on uncertainty, hopelessness, or abject despair. The relatively higher degree of despair on the part of nonmigrants also is reflected in a median level of anomia, registering 4.3 compared with only 3.2 for in-migrant household heads. Apparently the lower levels of living, lower family incomes, and lower occupational mobility experienced by nonmigrant household heads relative to their in-migrant coresidents is beginning to weaken specific social values, leading to some degree of fatalism and despair.

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[53] Daniel E. Alleger, "The Anomia of Rural People: Its Measurement and Correlates," Agricultural Science Review, Vol. 4, No. 1, First Quarter, p. 2, 1966.

[54] Strole, op. cit., pp. 709 to 716.

[55] Seung G. Moon and Glenn C. McCann, "Anomia Scales," Scaling Social Data, So. Coop, Ser. Bul. 108, pp. 55 to 64, 1965.

Table 53. Attitude Scale Scores for Household Heads, by Migration Type, 1970

Score value	Attitude statements associated with levels of anomia	Migration type			
		In-migrant		Nonmigrant	
		No.	*Percent*	*No.*	*Percent*
No personal anxiety or despair					
0	Disagrees with all six statements	30	20	20	15
Low level of anomia					
1	Agrees that nowadays a person doesn't really know whom he can trust	13	9	11	9
2	Agrees that public officials are not interested in the problems of the average man	27	18	6	5
Marginal level of anomia					
3	Agrees that the situation for the average man is worse	23	15	17	13
4	Agrees that today a person must live for the present and let tomorrow take care of itself	16	10	33	25
High level of anomia					
5	Agrees that it's not really fair to bring children into this world today	22	15	33	25
6	Agrees that things have usually gone against him in his life	19	13	10	8
Median level of anomia		3.2		4.3	

These findings are not altogether inconsistent with the high aspiration levels noted, especially for nonmigrants. C. Hobson Bryan and Alvin Bertrand point out that:

> Thus, it is assumed that whether lower strata individuals know about and utilize the resources which are available to them is not a simple function of "getting the word" to the people involved. People may desire improvement of their conditions, but they may "fatalistically" believe that little can be done to change their situation. The evidence shows that some people with knowledge of resource channels do not take advantage of them. These people may have held high aspirations before becoming apathetic or fatalistic.[58]

Increasing degrees of anomia may lead to the withdrawal of many low-income individuals with high potential for upward social mobility.

[58] C. Hobson Bryan and Alvin L. Bertrand, Propensity for Change Among the Rural Poor in the Mississippi Delta: A Study of the Roots of Social Mobility, U. S. Govt. Printing Office, p. 3, 1970.

SUMMARY AND CONCLUSIONS

This study is based on extensive data obtained in 1956 in 12 counties of the Arkansas Ozarks, matched and augmented by a 1970 survey covering half of the sample open-country segments used in the original study. These yielded detailed information on 629 households in 1956 and 313 in 1970.

The counties studied included Baxter, Boone, Carroll, Cleburne, Fulton, Izard, Madison, Marion, Newton, Searcy, Stone, and Van Buren.

Objectives of the study were to develop a statistical profile of the socioeconomic characteristics of the 1970 sample population and to identify changes in the socioeconomic status of households since 1956. A final objective was to determine how those families remaining in the area have adjusted to changing economic opportunities in the community resulting from the high level of migration from the area and in-migration of others attracted to the area.

Of the 313 sample households in 1970, 1 in 2 were one or two-member households with half of these (28 percent) having retired household heads. Advancing age and the continued outmigration of youths has increased the ratio of people 65 years or older to those 20 to 49 years of age from 1 in 3 members to 1 in 2.

Many family and individual characteristics are related to the level of living of rural people, and improvements provide a good indication of improved socioeconomic status. Housing conditions improved. Of the 313 rural households, about 3 in 4 have hot and cold running water inside the structure today, compared to 1 in 2 sample households in 1960. Seventy percent have a bathroom, compared to about 50 percent earlier, and rural electrification now has reached 99 percent of the sample households, compared with only 70 percent 10 years ago. The household material and cultural possession aspects of level of living show the greatest improvements in household management items, which reduce the burden of housework and release many women for employment.

Aggregate adjustment among the functional elements of the Ozark area economic base has produced a dynamic cross-breed of household economic types. The farm-nonfarm household, combining part-time farming with off-farm employment among its

membership, now represents 1 in 3 of the sample households, compared with 6 percent in 1956. These households had more total earnings than did those with only one activity, and they had more total labor resources and earnings than the other groups. Farm-nonfarm households used their labor more completely and their return per unit of resource was higher than for full-time commercial farm (1 in 20) and nonfarm households (1 in 6). The combined forces of out-migration and industrial growth have resulted in the complete disappearance of the semi-employed household (less than four months of employment), which represented 16 percent of the 1956 sample households.

Since 1956, significant changes have taken place in the labor force activities and occupations of the area residents. Of the 750 individuals considered eligible for work, 412 reported work experience during the 12 months preceding the study for a labor force participation rate of 55 percent, compared with approximately 70 percent for the nation generally. Lumber-timbering, sawmilling, and the manufacturing of wood products, the single greatest source of nonfarm employment for Ozark people 14 years ago, has been surpassed by commerce, other manufacturing, and construction in order of importance.

The Ozark area labor force, which in 1956 had a 13 percent reservoir of migratory farm wage workers, now has only 1 percent such membership. Another noteworthy development is the increase in nonfarm workers from 2 in 5 to approximately 2 in 3 members of the labor force. While, in 1956, half of the working men and one-fourth of the working women did some nonfarm work during the year, two-thirds of the men and half of the women now report nonfarm work experience.

However, the survey data clearly reveal that nonmigrant households did not share equally in the socioeconomic progress experienced by the residents of the area. While 2 in 3 in-migrants were able to locate nonfarm employment, only 1 in 2 nonmigrant labor-force participants reported nonfarm work experience during 1969. Thus, a substantial number of nonmigrants remain engaged in low-income agriculture, which is the fastest declining element in the area's economic base. Even here, in-migrants scored higher in the application of farming practices and mechanization than nonmigrant households.

Occupational change and job mobility among nonmigrant and in-migrant household heads indicate vertical labor-force adjustments in response to out-migration and industrial growth. However, in-migrant household heads showed a 25.8 percent increase in occupational status over the 1950 area labor force, compared

with a 7.7 percent increase for nonmigrants, as measured by the employed index of occupational mobility.

Underemployment of rural open-country residents still handicaps economic adjustments in the Ozark area. Household heads who were ordinarily in the labor market for the full year averaged below the 260-day full-employment level, but the 250 days for male and 240 days for female breadwinners is far better than the 190-day average for each reported in 1956.

Improvements in the type and scale of farming enterprises have reduced seasonality and improved utilization of family labor. While those members of the 1956 labor force engaged in farming operations averaged only 166 days of work, today they report an average of 195 days, which may be very close to full employment if recognition is given to the diversified economic activities of hill farmers.

The shifting of approximately 10 percent of the labor force from farm to nonfarm employment over the period of study may account for the relatively slight improvement in duration of employment for nonfarm workers. Workers reporting nonfarm employment in 1956 averaged 231 days, compared with 255 days in the present sample.

Underemployment is proportionally more common among nonmigrant workers. About 2 in 3 in-migrant workers worked 200 days or more during the year preceding the survey, compared with 3 in 5 nonmigrant workers. In-migrant male household heads averaged 251 days of employment, compared with 240 days for nonmigrant family heads. This suggests that in-migrants had initial advantage over nonmigrants in competing for the more stable employment opportunities.

The improved underemployment condition of Ozark area workers has its logical consequences in improved household and personal incomes. Farm households with their high degree of underemployment have the lowest average household income at $3,800. However, this represents a 58 percent increase in real income over the 14 years. Nonfarm households realized a 74 percent increase in average real household income, from $2,425 to $5,908. The average real income for nonwork households was $2,259, compared with $851 earlier, an 89 percent increase. The farm-nonfarm household ranked first in average real income at $6,724, compared to $2,061 in 1955, for a 133 percent gain in real income.

Economic opportunity, as measured by family income, was

approximately 25 percent greater for in-migrant households at a median of $5,030, than for nonmigrant families with a $3,930 median household income. This is partly accounted for by the fact than 31 percent of in-migrant working households had two or more family members employed at nonfarm jobs, compared with 17 percent of the nonmigrants. Additional analysis of household incomes on the basis of relative family size revealed that 43 percent of nonmigrant families and 38 percent of in-migrant households experienced some degree of income deprivation.

Earnings of nonfarm workers (median $3,390) remained low, despite the 153 percent increase in value adjusted for depreciation of the dollar. The disparity between earnings of male and female workers in nonfarm industry widened. In 1956 median earnings of women of $824 were $155 less than those of men; the $2,850 earnings in 1970 were $930 less than the median earnings of male nonfarm workers.

The family socioeconomic status scores reveal that nonmigrant households are lagging behind in-migrant families in level of living. Although the differentials in material possessions and social participation are slight, in the housing element of the socioeconomic scale in-migrants achieve greatest advantage. A score of 100 serves to represent the generalized housing norm for area residents. In-migrant households scoring 100 or more represent 63 percent of the sample, compared with only 53 percent among nonmigrant families. Furthermore, while 1 in 5 in-migrant families are experiencing serious substandard housing conditions, nearly 1 in 3 nonmigrant households report such housing quality. Therefore, an effective effort to ensure that all families are housed adequately would require special attention to the adequacy of nonmigrant housing, as well as new construction for in-migrants.

Much of the failure of nonmigrant families to achieve the higher levels of socioeconomic adjustment reached by in-migrants can be attributed to employability factors that mitigate against their pace of social mobility. A significant age differential in favor of in-migrant heads of households, who have a median age of 48 years compared with 62 years for nonmigrants, gives in-migrants a considerable advantage. Besides being younger, in-migrant family heads were typically better educated, with an average of 9.7 school grades completed, relative to 8.2 grades among non-migrant heads.

Thirty-five percent of the in-migrant heads reported previous job training; of these, 1 in 5 possessed mechanical, technical, or industrial skills. Only 15 percent of nonmigrant household heads

reported previous job training and only 4 percent of these had industrially related skills.

Another employability characteristic strongly favoring in-migrant household heads is physical health and disabilities. Fifty-four percent of the in-migrant family heads considered themselves in good physical condition, compared with only 36 percent of nonmigrant heads of households. With regard to ability for work, 62 percent of the in-migrant household heads were free from disabilities, but only 44 percent of nonmigrant family heads.

Thus, in-migrants appear to have exploited their more desirable attributes in competing for the employment opportunities created by out-migration and industrial expansion. Nevertheless, nonmigrants indicate a willingness to accept a good number of undesirable working conditions in order to upgrade family incomes. When the financial aspirations of household heads and their wives were combined to yield an indication of relative job mobility attitude, nonmigrant households scored 6.0 on a ten-point scale, compared with 4.8 among in-migrant households.

However, 58 percent of nonmigrant household heads were deeply pessimistic and discouraged regarding achievement of their individual goals, compared with 38 percent of the in-migrant heads of households. This may reflect a growing awareness of the lack of effective competition for jobs and a growing mistrust of personal capabilities on the part of nonmigrant household heads. The evidence of rather high rates of anomia among area residents suggests the need for social solutions that will allow for differential corrective action and match capabilities and desires of native residents—as well as in-migrants—with useful projects, thereby adequately rewarding the services of all rural residents in low-income development areas.

Although the data revealed that in-migrants should be attracted because of their contributions in the form of needed skills, valuable training, and experience, local community and industrial leaders must develop comprehensive plans for providing maximum feasible employment to the area's nonmigrant labor force participants. Manpower plans that foster more vigorous and careful enforcement of laws and regulations governing recruitment and employment may not be enough. If nonmigrant residents are to share in available economic opportunities, communities may wish to utilize their planning, zoning, and subsidization powers to encourage the location of types of industry in which labor force needs are met by nonmigrants—such as recreational and retirement-based facilities. Nevertheless, planning should provide a wide range of job opportunities so that both groups of residents

have enhanced chances of becoming prosperous and productive citizens.

Advancing age among native residents and the in-migration of retirement families create economic and social problems for area redevelopment that are beyond the reach of market-oriented programs. For many of these families, achieving satisfactory levels of living must necessarily depend on income transfers from welfare and retirement programs, plus programs emphasizing geriatrics and family health care. In addition, the availability of many small, residential farms suggests the development of retirement farming opportunities for the production of food for home-use consumption provided that low-cost capital and managerial assistance can be made available.

This discussion is not intended to suggest that migration should be discouraged. For the employee who remains behind, out-migration may at least reduce competition for available jobs or agricultural resources, while in-migration adds employees whose training or skills are needed for industrial growth and also retirement families with sources of nonmarket-determined income. Relocation and transfer-compensation payments may be necessary to facilitate this process and provide a better "rural-urban" balance. However, policy makers who are promoting a systems approach to solve national income inequality and poverty must recognize that development programs which fail to reach the "hard-core" of the rural poor are self-defeating and only lead to a continuing stream of unskilled rural migrants to central cities. The problems of rural America thereby become the problems of urban America, and national economic welfare is little improved.

The Ozark area continues to rank low in the state and nation in the education and marketable skills of its labor force. Also, years of out-migration of youths and the increasing age of residual residents have produced an adverse age composition that may severely retard the development of economic activities in years to come. Nevertheless, economic readjustment has produced several favorable aspects: (1) reduction of surplus labor in relation to area resources, (2) expansion of nonfarm employment, (3) reduction of underemployment, (4) development of the farm-nonfarm family type, (5) specialization in farming enterprises in livestock production, and (6) the movement to the area of retired people with improved retirement incomes.